(0) D2/62 -f- 4 61



M. Baillie

FACTS AND OBSERVATIONS

ON

LIVER COMPLAINTS,

AND

BILIOUS DISORDERS,

IN GENERAL;

And on those Derangements of that important Organ and of its immediate or intimate connections, which most sensibly influence the

BILIARY SECRETION;

With Practical Deductions, drawn from an ample Share of Experience and a close and constant Attention to this Subject, in various Climates;

CONNECTED BY AN APPROPRIATE AND SUCCESSFUL

Mode of Treatment.

The whole illustrated and confirmed by an extensive Selection of Cases, demonstrating the many serious and fatal consequences which too often arise from a mistaken view of the primary seat of Disease.

THE THIRD EDITION.

WITH ADDITIONAL PRACTICAL OBSERVATIONS.

BY JOHN FAITHHORN,

FORMERLY SURGEON IN THE HONOURABLE EAST INDIA COMPANY'S SERVICE.

LONDON:

PRINTED FOR LONGMAN, HURST, REES, ORME, AND BROWN, PATERNOSTER ROW.

1818.

61
1412

ROYAL COLLEGE OF PHYSICIANS OF LONDON

J. Innes, Printer, 61, Wells street, Oxford Street, London.

TO

MATTHEW BAILLIE, M. D.

PHYSICIAN TO HIS MAJESTY,

F.R.S. OF LONDON AND EDINBURGH, &c. &c.

SIR,

THE obligation you have conferred on the Profession, by the Publication of your invaluable Work on Morbid Anatomy, and the minute and unwearied investigation you have therein displayed in tracing the numerous consequences of diseased organization in every part of the system, emboldens me to inscribe to you the present Edition of a Work, of which I consider you as the most able judge. There is no organ of the body you have illustrated, which is liable to so frequent and varied morbid changes of structure as the liver. Its several diseases have for a series of years engaged my most sedulous attention. The several opportunities I have had in consulta-

tion with you, have afforded me the highest gratification, from the accuracy of your judgment, the candor and liberality of your sentiments, and that feeling of friendship which I shall ever gratefully remember. Accept, then, this small tribute of respect, equally due to your private as to your public character, which I should not have ventured in this manner to offer, had the Work not already been stamped with high professional, as well as popular approbation.

I have the honor to be,

Sir,

With the highest consideration,

Your obliged

and obedient Servant,

JOHN FAITHHORN.

12, *Berners Street,*
May 1, 1818.

PREFACE

TO THE THIRD EDITION.

THE extensive and rapid sale of the two former editions of this work, have been highly gratifying to the Author, for two strong reasons; the first, that it has flattered him with numerous communications of invalids, and the no less pleasing satisfaction of being consulted by many of the first professional characters, who has ceded their own opinions in favour of his, from conviction of his greater experience and attention to the exclusive subject of hepatic and bilious affections; the second, that it has given him proofs of the interest the public in general have taken in his labours, from their own feelings and experience on the subject, and from conviction of their practical importance; these considerations

are to him an ample reward for whatever pains and industry he has bestowed in offering his sentiments to public attention.

The first edition of this work was inscribed to the Honourable the Court of Directors of the East-India Company, as a mark of respect to that body, who are ever attentive to the professional qualifications of those that are admitted into their service, and where a part of the experience in the treatment of diseases of the bile, and affections of the liver, was acquired by the Author.

The second edition, considerably enlarged and improved by new facts and observations, daily accumulating in an extensive practice, was addressed to John Underwood, Esquire, formerly an eminent Surgeon at the Presidency of Madras, whose long experience and practical acquaintance with affections of the liver, and all that class of visceral diseases, so frequent in warm climates, rendered him an

able judge, to estimate the value of the observations made on the subject in the following work, which was rendered at the same time more interesting to him in what regarded the treatment, by the consideration of my having successfully attended him in a serious and obstinate indisposition, marked by jaundice, with a general disordered state of the hepatic system, and the organs intimately associated with its functions; the satisfaction of the approbation of so competent a professional character, is literally *laudari à laudato viro.*

Though numerous professional works have appeared on bilious diseases, from the time of Dr. Saunders, whose elaborate Treatise gave a lead to practitioners in the metropolis, yet none of them have been adapted for popular use.

A writer should have always this object in view; in tracing his subject, he should do it

in such a manner, that the truth it conveys, may produce conviction on the patient, as well as on the professional reader. If his work be written in this manner, he confers a benefit on society; and prevents many from falling victims to error in the treatment, or placing themselves in improper hands. Every man becomes thus a critic on his own complaint; and it is of the highest consequence, that he should be able to form a correct, rather than an erroneous, judgment. Besides, patients are often placed at a distance from professional aid; by works of this kind, they are better enabled to give a proper description of their ailments, and thus to furnish a practitioner with more accurate information, in order to obtain that relief which they could not otherwise acquire, without the previous knowledge which such writings impart. It is not meant, however, to go so far as to say, that every man, by such means, may become his own physician; this is an unfortunate error, and has often

been carried to too great an extent. The best that popular treatises on medicine can do, is, to put patients on their guard, and in doing this, they are certainly of great utility to mankind.

One reason assigned for a publication of this kind by the Author, and in which opinion all the best informed writers agree, is, that affections of the liver are often apt to be mistaken, from their similarity to stomach complaints, and even some affections of the abdominal viscera ; hence, it is obvious, that too much nicety cannot be observed in pointing out the distinctions which more particularly mark them ; and if this is necessary with the members of the profession themselves, it is still more so with the public at large.

The author has written only from what he has seen, and noted only what he knows will be useful. His own sufferings were his first

motive in the publication; and he felt it his duty to convey that instruction to others, which he found so necessary in his own situation when under disease.

The following Work rests solely on its own merits, the solid basis of an ample share of experience, uninfluenced by any theoretical speculation, except such as might arise out of the successful results of a great variety of cases; it is designed to shew the frequency of liver complaints and bilious disorders in this country, to point out the danger of their being mistaken for others of a different nature, and by rousing the feelings of patients for their situation, to stimulate them to call for professional assistance, at all times necessary, and particularly so in diseases of a dangerous and insidious tendency. By their acquaintance with the symptoms, as here pointed out, they will not be deficient in the means of painting them in their true colours, and of

giving a correct statement, whether they consult personally, or by letter, on those leading facts which regulate professional opinion.

This work commences with observations on such derangements of the hepatic organs as influence the biliary secretion, introduced by a general view of the structure and functions of the liver, pointing out its vast importance in the animal economy, and the various uses of its secretion to the health, and correct operations of the constitution.

With these are interspersed particular remarks on the gastric fluid, on some affections of the intestines, and those parts sympathizing with the hepatic system ; likewise some new observations on the various changes and appearances of the biliary secretion, &c.

This treatise is illustrated and confirmed by a numerous selection of cases, shewing the deceptive appearance of liver complaints,

and the great danger of their being mistaken for other affections of the neighbouring organs, particularly of the lungs, as demonstrated in the course of the work; where it will be seen that several disorders, primarily originating in the liver, have been unfortunately and erroneously considered as having a different seat; such, among others, are coughs, asthma, and even pulmonary consumption itself.

In treating the subject of liver complaints, there is first given an accurate account of their leading symptoms, both in the acute and chronic state, and particularly of those varieties which mark the latter; so that no mistake might occur in distinguishing them. A view is next taken of the biliary secretion, and its importance and various uses pointed out in the animal economy. Some erroneous opinions on the gastric fluid are then noticed, shewing that bile, in the natural state of the stomach, never passes into this organ, except

in the act of violent vomiting, or when the biliary ducts are obstructed. The structure and functions of the intestines are also particularly explained, with a view to shew the action of the bile on them, and the consequences which attend a morbid condition, or deficiency of this fluid.

It is not the intention of the Author in future to enlarge the Work with additional Cases; however grateful Patients may feel for the relief they have experienced, they the apt to feel an extreme delicacy in regard to the publishing their complaints: the motive which induced him to do so in the first instance, was more fully to illustrate his opinions, and that he might have the opportunity of further reasoning on some important points essential in the treatment, as well as to enable the sufferer to comprehend the malady with which he is afflicted.

With such preliminary information, essen-

tial to a full acquaintance with their history and nature, the treatment of liver complaints commences; and the necessity for a proper and careful examination of the secretions is strongly and minutely pointed out, and enforced in conducting it. The principles of cure are, at the same time, accurately laid down, and a persevering observance of them strongly recommended.

In the present edition, are annexed three small chapters; one on dropsy, as a sequel of liver complaints, where neglected or improperly treated; another, on gall-stones or biliary concretions as a cause of jaundice; and the third, on morbid sensibility, supersentient feeling, excessive susceptibility or nervousness, constituting disease.

CONTENTS.

PAGE

INTRODUCTION - - - - - 1
General Description of the Liver - - - 2
Secretion of the Bile - - - - - 9
Uses of ditto - - - - - - - 11
Chemical Analysis - - - - - 13
Bilious Diseases - - - - - - 15
Observations on the Spleen and Pancreas - - 21
1. Acute Hepatitis - - - - - - 23
Treatment of Hepatitis - - - - - 26
2. Chronic Hepatitis - - - - - - 31
Peculiar Forms of Liver Affections, or those Ailments which proceed from a Bilious Origin, viz.:
1. Cough, Asthma, and apparent Consumption - 43
2. Mesenteric Disease - - - - - 47
3. Stomach Complaints - - - - - 50
4. Head-achs - - - - - - 52
5. Lowness of Spirits and Despondency of Mind - 53
6. Chronic Debility or Weakness - - - 54
7. Of Flatulence - - - - - - 56
8. Morbid Sensibility; Supersentient Feeling; or Nervousness—constituting Disease - - - 58
9. Some new Observations on the various Changes and Appearances of the Biliary Secretion - 61
10. Remarks on the Gastric Fluid - - - - 66
11. Important and Practical Remarks on the Intestines 68
Stricture of the Intestine, not unfrequently a consequence of Hepatic Disease - - - 74

PAGE

Accumulation of Indurated Fæces, mistaken occasionally for a Tumour of the Abdomen, of a different nature - - - - - 75

12. On Gall-Stones, Biliary Concretions, and Jaundice 76

13. On Dropsy - - - - - - - 79

Treatment of Chronic Hepatitis - - - 82

Altered Organization of the Liver - - - 102

Concluding Observations - - - - 106

Case of Hydrocephalus Internus, or Water in the Head. [The chapter on this subject is omitted in this edition, although the case is retained, in order to exemplify that the foundation of this highly alarming and dangerous disease, originates from Hepatic and Biliary obstruction] - - 109

Cases of Acute Hepatitis - - - - 111

Case of Accumulation of Vitiated Mucus - - 115

Mistaken Pectoral Cases - - - - 116

Cases of Chronic Hepatitis - - - - 121

Conclusion - - - - - - - 159

PRACTICAL OBSERVATIONS

ON THE

Nature and Treatment

OF

LIVER COMPLAINTS,

AND

BILIARY DERANGEMENTS.

When we contemplate the admirable structure and nice arrangement of the human body, its delicate form, the number and exquisite fineness of its movements, it cannot be matter of surprise, that it should so often become the subject of disease, especially when we reflect on the numerous ills, to which it is daily and hourly exposed, as well from external causes, as from its own organization, and the operation of its own powers: the general system comprehends within itself many subordinate systems; the proper functions of which must harmonize to form perfect health; and the constitution of our frame is such, that no one part of importance can be materially disordered without re-acting on other parts, which in their turn, likewise, give rise to a series of altered actions; and thus, the whole system is finally drawn into morbid consent.

Before entering upon the diseases of the liver, and in order to explain their nature more fully, it will be proper to give a general view of the structure of that organ, its leading functions and appropriate secretion, in respect to its nature, quality, consistence, and variation. In the formation of the animal system, in all its subordinate gradations, there is no organ so constantly met with as the liver, and wherever found, there is no apparatus of secretion so complicated as it displays for the preparation of bile; hence, our attention is naturally drawn to this elaborate organ, as it holds in so eminent a degree the sovereignty over the motions of the intestinal canal, being so strictly connected to it by its system of vessels, and by its functions.

The immense size of the liver, the number and magnitude of the parts which compose its complicated vascular machinery, its enormous magnitude in the early stage of fœtal existence, so well worthy remark, and its especial connection with the circulating organs at that period, all lead us to conclude that it answers some other purpose in the economy besides the secretion of bile; for it must be confessed, that our knowledge of its functions is as yet by no means complete. In animal bodies it is found that one organ ministers to several functions; and the following observation of the sagacious Haller deserves particular attention: "When I reflect," says he, "that there is no bile required in the fœtus, there being no food

received; when, again, I see that the liver is of great size in the fœtus, and not small like the lungs, which are destined to an operation in the economy after birth, I cannot but suspect that it has some other use in the fœtus than merely the secretion of bile."

The organization indeed of the liver is peculiar; it is in some degree firmer and drier than any of the other viscera, and differs from every other organ of the body, in having the office of secretion carried on by a vein, in place of an artery, which performs the double office of secretion and nutrition in every other gland, except in the liver.

This organ, in its most healthy state, is of a reddish brown colour, is composed of a tolerably firm and close substance, consisting of a closely united congeries of different vessels, and is of considerable weight, especially when increased by the accumulation of disease. It lies in the right hypochondrium or upper part of the abdomen, extending a little towards the left side, more particularly when increased in substance by the encroachment of disease, and is situated immediately under the vaulted cavity of the diaphragm, or muscle dividing the chest and abdomen; but it is more deeply covered by the ribs in the male than in the female sex.

When we lie on the right side, the liver is supported in the cavity by the corresponding false ribs, and presses on none of the surrounding organs;

hence we commonly sleep in that attitude. In lying on the other side, the weight of the liver inclines upon the stomach, which after a meal produces unpleasant sensations. In the natural situation of the organ, it corresponds nearly to the level of the basis of the chest, being sometimes a little above, but seldom below. The right extremity also of the liver is situated much lower than the left, and is the most bulky part of the organ.

Its principal parts are its ligaments, its surfaces, its margins or edges, its tubercles, its lobes, and its vessels. By its ligaments, it is attached to the different surrounding parts, and it is from the influence of these ligaments, when affected by hepatic diseases, that irritation, pain, and uneasiness of different parts of the chest and abdomen arise. Its surfaces are a superior one, smooth and convex, which is applied to the diaphragm; and an inferior one, unequal and concave, which looks towards the abdominal viscera. Its margins or edges are a posterior and superior one obtuse, and an anterior and inferior one acute; and it is of particular importance, in judging of the state of the liver, to know with accuracy, the feel of this anterior and inferior margin or edge in its natural and healthy condition. Its lobes are a right and left one, and a lobulus spigelii. Its vessels are the vena portarum, the hepatic artery, the hepatic vein, and the biliary ducts. Its nerves are small in comparison to the bulk of the organ, consequently considerable

derangements may take place without being very sensibly felt by the patient.

The circulation of the liver is an operation in its structure, which requires particular consideration, as on this the capacity of its secerning function is entirely regulated; this gland may justly be considered as the grand reservoir, which receives into its circulation most of the returning blood of the body, charged with the several impurities it has met with in its progress, which are again removed by its secreting office in the conversion of the properties into that fluid, we term the bile: the bile therefore, as formed, is a compound fluid, consisting of the collected colluvies of the constitution, so incorporated with the other essential products of the organ, as results from its glandular economy; thus we again impress that the liver so intimately linked with the intestines, connected by nerves, by blood vessels, and by ducts, holds a controul over their actions by the stimulating fluid which it imparts to them.

This organ also, as being truly a net work of blood and lymphatic vessels, favors the deposition of various kinds of noxious matters in its substance, according to the specific action of the depositing vessels, and the general disposition of the gland at the time; hence its greater tendency than any other viscus of the body to assume derangement.

The liver is evidently the largest gland of the body. Its ordinary weight in a healthy adult is

about three pounds; but the most remarkable variations in the organization, are those which are consequent to the chronic diseases of this organ, sometimes it is diminished and very manifestly indurated; yet more frequently it is enlarged, sometimes so much so, as to weigh ten, or twelve pounds, or even more. It may be said to be composed of a variety of vessels, the extreme branches of which, are intermixed so as to form numberless pulpy corpuscules, named acini, from their resemblance to small kernels of fruit. From the circumstance of its minute and tardy circulation, the seat of disease is oftener here, than elsewhere, and besides which, it may additionally be observed, that the blood in this portion of its circuit is apt to lose more of that principle on which its vital energy depends.

The gall-bladder is attached to the posterior, and almost the inferior part of the great lobe of the liver, is firmly bound to its surface by the peritoneum, and is furnished with its biliary fluid, through the hepatic and cystic ducts; the bile which descends by the hepatic-duct, meets with more resistance in passing into the duodenum in the empty state of the gall-bladder, than in its regurgitation; so when there is any considerable resistance by aliment or wind within the duodenum, and the gall-bladder is not fully distended, the bile passes upwards to be lodged in this reservoir for a certain time, and after remaining there, is pressed down either by the pressure of the stomach, or the

action of the external parts of the diaphragm and abdominal muscles, or by a supposed action of its own coats, through the cystic, and through the common duct, into the cavity of the intestine: this duct opens into the duodenum in an oblique direction, first passing through the external tunic, and then piercing the other coats, after running between each a very little way, and thus, such provident arrangement serves two useful purposes, to promote the discharge of bile, and to prevent its return. The cystic and hepatic bile, though they have the same primary origin, yet they differ in consistence and quality; for, by the stagnation, changes are made, the thinner parts are taken away by the absorbent vessels; but there may be at the same time other changes effected in consequence of the stagnation, intestine changes, which can not be so easily pointed out as that of its simple consistence.

The expulsive force of the bile is little more than what is received from the mere pressure of the stomach and diaphragm, as the muscular fibres of the proper membrane are too weak and inconsiderable to possess that power which may be thought equivalent to contract the gall bladder.

From this view, the nature or property of the bile is of two kinds, the hepatic or that forced immediately into the intestines; and the cystic or that which passes into the gall bladder, and is there allowed to accumulate; the former is of a faint yellow colour, inodorous, and very slightly

bitter; the latter, from the serous parts being absorbed by the lymphatics, becomes thicker, and therefore darker and more actively operative from concentration.

There is no direct communication between the liver and gall-bladder, and consequently no other way for the bile to enter the gall-bladder, except by the cystic duct. The inner surface of the gall-bladder is elegantly reticulated, and furnishes a viscid mucus that mingles with the bile, and this is the more indispensible, as the bile in the gall-bladder by stagnation, becomes more thick, bitter, and exalted in quality than that flowing from the liver.

It may here be remarked, that most animals are furnished with this receptacle, though in some it does not seem necessary, as in most of the swiftly running, and many of the herbiferous kind; at the same time we may notice, that the gall-bladder has been found wanting in the human subject, while in other instances, a double one has been discovered, but such lusus naturæ are extremely rare.

In considering the secreted fluids of the body, according to the opinion of Van Swieten, "The bile and phlegm are of so opposite a nature, that they can never predominate together, bile being the greatest detergent, dissolvent, and attenuant of all pituitous matter.'

SECRETION OF THE BILE.

The bile, or secretion of the liver, is formed in the substance of the organ; it passes from thence by biliferous tubes, all which terminate in the hepatic-duct, but a greater or less proportion passes by the cystic-duct, to be stored within the gall-bladder. Though the principal use of this fluid is to separate and discharge the feculent part of the aliment, yet there is every reason to presume, that there are other ulterior and intrinsic purposes, which it is intended to serve in the animal economy, seeing that, for its preparation, nature has appointed so large and complicated an organ; for the bile seems necessary to perfect the assimilation of the aliment, and to convey to the chyle some principle, which enables it to impart renewed energy to the general mass, in its distribution through the system. It is to be observed, that not until the aliment has passed the gall-duct at its duodenal entrance, is there ever any appearance of chyle being absorbed, exemplifying, that some intimate influence of the bile is essential to its production.

The natural appearance of this secretion in colour, is a yellowish green, of a mucilaginous or oleose consistence, resembling in its frothiness, when dissolved in water, a solution of soap and water. Its smell is fatuous, somewhat like musk, especially

perceived in evaporated bile: in its taste, it is more bitter in the human subject than in animals.

With regard to the quantity of bile that is secreted, and poured into the duodenum in the twenty-four hours in a state of health, there has been much dispute among physiologists; however, the proportion conjectured to be secreted in that space of time, is calculated at about six ounces. The ordinary quantity found in the gall-bladder, is usually about an ounce, although it has not unfrequently been found to contain a much larger portion, more especially in a state of disease. A remarkable case of this kind will be found recorded in the Edinburgh Medical Essays, in a boy who died from an accident, where the gall-bladder was distended to such an enormous degree, as to contain eight pounds of bile.

The biliary fluid, when unobstructed, probably passes directly into the intestine, while the assimilation of food is going on; but when the empty state of the duodenum causes the end of the ductus communis choledochus to be compressed by its muscular coat, then it regurgitates into the gall-bladder. When the stomach is also distended with aliment, the gall-bladder undergoes a certain degree of compression, by which the bile passes out into the intestinal canal. We should imagine that the quantity of bile secreted in health varies in different individuals, independent of disease; and therefore, what is sufficient for exciting the action of the bowels in one individual, is not so in ano-

ther; we can, however, only judge from its effects, whether it be in excess, or formed in two small a quantity, this being the most certain criterion. However various the uses of this fluid may be, it is unquestionable, that its primary and obvious property is essential to regulate and carry on the functions of the alimentary canal; and there its different offices are,

1. To extricate the chyle from the chyme or digested food, as sent into that part of the intestines termed the duodenum.

II. To excite the peristaltic action of the intestines, is one great and important part of its principle: this should be particularly attended to by practitioners; for, if defective, the necessary peristaltic motion cannot be sufficient for the expulsion of any collected accumulation, and consequently, such increased and violent action of their muscular powers must thereby ensue, as in time, to lay the foundation of stricture, ulceration and its consequences. Nor can this necessary motion of the intestines be properly accomplished by the hepatic bile alone, if the cystic be wanting, both being of equal importance to the system, and requiring their elaborate union, in order, to enable the bowels completely to perform their functions, and to impart to them at the same time a tone, which, by nervous communication, is transmitted to the whole system; this is sufficiently confirmed by what happens in wounds of the gall-bladder in animals, where the flow of bile in this incorporated

state is prevented, and from this cause it generally occasions death in a few days.

In all cases of slow action of the bowels, it is a matter of high import, and should be closely attended to by the practitioner, to observe, with minuteness, the character of the alvine discharges, in order, with correctness, to judge of the quantity and quality of the bile present, whether it be sufficient for the expedient and solutive purpose, or an additional supply be required. The same observation should take place where a diarrhœa prevails, accurately to ascertain whether the quantity of bile be in excess, and to rectify that fault equally with the former.

III. The third particular of this fluid is to impart the yellow colour to the discharge, and this is evidenced by the pale appearance of the fæces in cases of jaundice, and also in children, where it has not attained its complete elaborate state.

IV. A fourth purpose which this secretion serves, is to prevent the accumulation of mucus, and to neutralize any disengaged acid in the primæ viæ; for its presence in the natural proportion, by absterging and attenuating the mucus, precludes the possibility of its undue collection.

It may be considered as an established fact, that when the bile is deficient in quantity, or too mild and inactive in its quality, or of so thick and tenacious a consistence as to obstruct its canals, then it becomes ineffectual and unfit for the healthy purposes of the animal economy, and must thereby

give rise to various forms of disease, connected with such morbific deviations.

Bile, in the alimentary tube adequately diluted with the pancreatic juice, may be considered as the necessary menstruum for enabling the chyliferous glands sufficiently to absorb, and provide from the food, that nourishment equal for repairing the continual waste and wants of the frame.

Though much has been said by authors on the putrid nature of the bile, yet this does not seem confirmed by actual experiment; for, it is a well known truth, that bile out of the human body is very little prone to become putrid, by no means in an equal ratio, or so readily, as the other fluids of the living system; this, therefore, decidedly demonstrates its peculiar influence in preventing those chemical changes, which lead on to putridity on all those unassimilated materials in the first passages, where this antiseptic fluid is suspended or defective.

To understand more fully the nature and composition of this elaborate and important fluid, it may perhaps be proper here to give its chemical analysis. It contains,

I. A large proportion of water.

II. A substance closely resembling animal albumen.

III. A peculiar resinous inflammable matter, naturally and intimately mixed with it.

IV. Soda, forming a kind of soap or saponaceous extract.

V. Some neutral salts;

VI. And a small quantity of oxyd of iron.

Besides these constituents, there is a colouring and odorant matter, but it is not yet ascertained whether these are properties of any of the above-mentioned ingredients, or whether they belong to a particular substance.

Some chemists have thought, that they could likewise detect a saccharine matter in bile, but the experiments to this purpose, have by no means been conclusive.

The secretion of the pancreas is a subject which has hitherto been but little investigated; yet may it not be considered as a stimulus to the peristaltic action of the biliary-duct, in the like manner as the bile is the peculiar stimulus to that action of the intestines, as its excretory duct unites with the biliary one at its duodenal perforation?

We may also observe, that as the bile is a viscid fluid, and from inactivity of body in fat animals, is known to thicken, which no less happens in the human subject from the same causes, especially, where the person is under the influence of depressing passions, as grief, &c. rendering the circulation languid; under these circumstances, it easily coagulates into a hard, somewhat resinous, and often stony substance: thus concretions, or gall-stones, are formed in the gall-bladder, and even are found here more frequently than in the urinary-bladder, as is every day discovered by dissection.

DISEASES OF THE LIVER.

After this general view of the structure, functions, and economy of the liver, we come better prepared for entering upon the consideration of its diseases. And when we reflect on the importance of the organ, and the functions it performs in the economy of life, together with the variety and delicacy of its structure, we cannot be surprised to find it on so many occasions the seat of extensive and dangerous diseases.

But without going into so minute a statement, it may be observed that the liver, like most other parts of the body, is liable to inflammation under two forms, the acute and the chronic; and it has generally been supposed that these varieties of disease consist, in fact, of a difference in the absolute seat of the inflammation. Some physicians have suggested that the inflammation is of the acute form, when the enveloping membrane of the liver is affected; and of the chronic form, when the parenchyma, or substance of the organ itself, is too highly excited; while others have conceived, that the acute inflammation appears, when the extremities of the hepatic artery are particularly affected; and the chronic, when the branches of the hepatic vein, or vena portæ, (which conveys the principal portion of blood to the liver), is the seat of the morbid action: it is of very little

consequence, however, which of these opinions is right in a practical point of view.

The former by their active operation and rapid influence, unless quickly counteracted, soon destroy the energies of life; the latter, by their slow and insiduous progress, give a check to the enjoyment of health, and gradually undermine the constitution without immediate alarm, until the evil has proceeded so far, as too often to baffle recovery. Of the *latter*, there is no class of disease, to which this observation can be more justly and generally applied, than, to those which are termed bilious disorders, or liver complaints, and there is no subject of practical medicine, which calls for more exact discrimination, and skilful management on the part of the practitioner.

Bilious disorders in this country are frequently insidious in their attack, tardy in their progress, and considerably varied in their appearance; hence, too many fall victims to the ignorance or misapprehension of those, to whom they confide themselves, from the true nature of the disease not being seasonably detected, or from the injudicious treatment of the disorder, though known to depend on this cause; whereby the chain of diseased action is lengthened, by forming links more difficult to be broken, but still to be destroyed by discernment and steady means.

It is by experience in a tropical climate, that the precise nature of hepatic affections, and bilious derangements in general, can be best comprehended,

and their successful management more correctly understood. It is here diseases advance with an almost incredible force, with most serious effects; and, an active and energetic enforcement of medicine is the only resource to arrest their rapid and alarming progress. In this school, then, a practitioner has the most enlarged opportunities of making his observations. He learns here to apply his knowledge with adroitness and effect, his professional judgment and abilities are instantly required to be exercised, in order to counteract and subdue those dangerous results, the sequlæ of morbid impetuosity, and instead of trusting to the weak and inefficient efforts of nature, as in colder climates, he is impelled to a different line of conduct, to meet them promptly with all the means which experience and observation render him master of. It was in a warm climate these truths were first impressed on my mind, and they have acquired additional confirmation from an ample share of experience since my return to my native country.

The deranged and irregular functions of the liver and its peculiar secretion, the bile, have a most important influence in every climate, in the production and aggravation of disease; and it is not until within these few years, since our intercourse with the tropical regions has been extended, and the treatment of bilious diseases in this hemisphere has been frequent, that the real importance of this organ in the animal economy has been duly

estimated, and that many of the phenomena in disease have been satisfactorily explained, by referring to this detergent viscus as the source from which they originate. Although the ancient physicians were correct in the mode of treatment, yet, their comprehension of its pernicious effects were confined to a very few diseases; modern observation, however, and an expanded train of experience, have pointed out this as the hydra, which, oftener than any other morbid cause, proves fatal to mankind.

The more we contemplate the structure of this organ; its magnitude compared with others; its singular circulation, and the vast quantity of blood which passes through it, the more we must be satisfied that it is intended for a leading operation in the functions of life: Any considerable interruption or irregularity of that operation, must be attended with the most serious and fatal consequences; and even, every lesser deviation from its natural state must be felt more or less, in the production of general derangement and disorder of the system, of which it forms so principal a part; from its complex structure, and sluggish mode of circulation, it is obvious, that it cannot flow much more quickly than is usual, with impunity or without engendering disease: indeed, we may observe, that the same liver which is often insensible, enlarged, and inactive in one portion, will, in another part, be suffering at the same time from all the consequent results of active inflammation, and

that even going on to a change of its organization; it is this mixed state of derangement, which occasions those singularly changeable and almost indescribable symptoms, so frequently experienced in hepatic affections.

My intention, therefore, is to point out the absolute and indispensable necessity there is, for a more minute and close investigation into those changes to which the liver is liable, and of the variations to which the biliary secretion is exposed from different causes; at one time becoming completely locked up, and at another, being poured out in the most depraved, acrid, and vitiated condition.

Having myself been long a sufferer from a diseased state of this organ, while in a tropical climate, and having surmounted the danger to which I was then exposed, I was necessarily led to reflect deeply, on this subject, and to devise, what were the best measures that could be adopted, to counteract its diseases in all their peculiarities; my own case afforded me much interesting information, and in some degree better enabled me to form a more correct judgment of its general and baneful operation on the human frame.

I may here take occasion to notice, that in warm latitudes, the resinous matter of the bile seems to be more abundant than elsewhere; it appears also occasionally to separate from its union or combination with soda; the same circumstance occurs in a diminished degree even in our own climate;

for, by burying itself in the organ, it thereby occasions considerable irritation, and consequently proving the source of continued excitability and inflammation.

From an ample experience thus acquired, in tracing the advances, and conducting the treatment of various affections of the liver, and bilious diseases abroad, in the different settlements of the Honorable East India Company, at Madras, Calcutta, Bombay, Batavia, China, &c. I could not conceive that a morbid bilious cause, so active and so general in the tropical countries, should lose its reigning and paramount influence over the animal economy even in this country. Ever since my return, this subject has particularly engaged my attention, and my own observations, as well as those of my medical friends who have been in the East Indies, support me in the assertion, that liver complaints and bilious disorders, are as frequent here as in the warmer countries: but here they assume a different and more ambiguous character; their appearances are less distinctly marked; the vitiated secretion does not shew the same rapid progress and strong apparent change, though the derangement it produces is not less severe or active in the destruction of health.

Indeed there can be no doubt, that bile in different states and conditions, often gives rise to such an almost inconceivable variety of anomalous symptoms, as to ape almost every other disorder; consequently great attention and experience are

required, to distinguish properly its operation and effects. It is to trace, then, these latent, these insidious and less obvious forms of attack so often mistaken, and that too fatally for patients, that the present work is intended; wherein I shall first consider the more perceptible forms of hepatic derangement, known to every medical practitioner, and then point out the varieties usually met with in this country, under other and mistaken denominations.

The spleen and pancreas are two organs with which we are little acquainted, and physiology has offered us less insight into their particulars and economy, than any other in the human body; from their proximity, it is clear, they must affect and be mutually affected by the liver. So connected is the whole of the circulation of the abdominal viscera, that the interruption by disease of any part, must necessarily influence the whole, independent of that interchain of sympathy, which extends from one part to the other.

The spleen is known to be subject at times to considerable enlargements; such enlargement arises from an obstruction in the portal circulation; the blood not passing here with its usual facility through the natural course of the vena portarum, necessarily falls back again on the spleen and the other abdominal appendages; and thus from continued and repeated surcharges, such a congestion is produced as to glut the vessels, thereby destroying the necessary

balance of their circulation, and occasioning, particularly in the spleen, often a considerable alteration in structure; even to that almost incredible extent has it been known to enlarge from disease, as to weigh twenty-three pounds; it is evident, therefore, that where it exceeds its natural volume, it must by its mechanical pressure, and consequent occupation of more space in the abdominal cavity than is correct, most seriously affect the economy, circulation and functions of the several adjacent organs, which, by morbidly re-acting, considerably exacerbates the primary and suffering liver. Any sensible enlargement of the pancreas will inevitably, at all times, induce such pressure on the biliary ducts, as will lead to the formation of permanent jaundice, and its morbid increase has been found to have exceeded six times its natural magnitude; it is also subject to calculi, which, by occasionally blocking up its duct, shut out the flow of its secretion into the intestines, thereby producing alarming mischief.

It is only therefore necessary to observe, in respect to the before-mentioned viscera, that as the liver is the point of termination for the whole abdominal system of venal circulation, so the latter organ will of course be additionally disordered by any barrier to its regular circuit, and thus suffer from its relation and connexion.

In entering upon the subject, we may observe, that diseases of the liver are most frequent in the

autumnal season, or near the vernal and autumnal equinox, when the weather is changeable, and excessive heat is succeeded by severe cold.

INFLAMMATION OF THE LIVER.

I. ACUTE HEPATITIS.

This acute form of the malady is not so frequently met with in England; it is more generally the production of a vertical sun, by the excessive stimulus of heat, affecting the slow circulation of the organ, and exciting it to morbid and irregular action, with often an immoderate increase of its secretion. The symptoms of this disease, generally commence with rigors or shiverings, followed by a pungent pain of the right side, which is felt also under the margin of the ribs, shooting more particularly in the direction of the back, and to the shoulder blade; cough, oppression in the respiration, nausea, sickness, often with a vomiting of apparently bilious matter, accompanied with considerable fever; great watchfulness, and occasional delirium; extreme thirst, the tongue generally covered with a white crust, extending also to the mouth and fauces; dejection of spirit, sometimes hiccup; loss of appetite, and difficulty of lying, except on the affected side, yet instances now and then occur, where the patient is unable to lie on either side; pressure also on the region of the liver, where there is

usually some tension, induces considerable increase of pain and tendency to cough, and the cough attending this disease, is more generally dry than moist; the bowels are frequently irregular, though oftener slow than otherwise; the urine secreted in small quantities, is of a high colour, and often tinged with bile; the pulse is hard and strong, sometimes exceeding one hundred and twenty in the minute, and at times intermitting; it is attended occasionally with a jaundiced colour of the skin, arising from the bile not getting readily into the common duct, by reason of the pressure of the inflamed liver on the pori biliarii; while the continuance of inflammation occasionally induces, as the resulting consequence, adhesions of the organ to the contiguous parts, or considerable enlargement of particular portions, such as the lobes, where suppuration ensues, or sometimes scirrhosity.

But in every inflammation of the liver, it may be observed, that the symptoms are more or less acute according to the degree of sensibility in the part affected. When the membranous covering of its superior convex part, or the ligaments which unite it to the diaphragm are inflamed; the pain, fever and difficulty of breathing, are much more violent, than when its interior, pulpy substance, or its concave inferior part, is affected; which being less nervous, are less susceptible of the morbid cause. The liver in its plethoric state, where it undergoes too much action, and acquires a turgescence and

plenitude in the pori biliarii and ductus hepaticus, has its faculties stifled, unless such surcharge be speedily removed through the ductus communis into the duodenum, and the obstruction therein prevented, by stimulating the intestines, and increasing their vermicular movement.

Where the inflammation acts with extreme violence, the increased secretion of bile, is sometimes thrown into the first passages, occasioning considerable derangement in the state of the evacuations.

In most cases, the secretion of bile is profuse, though its passage into the duodenum is oftentimes impeded, so that jaundice is no uncommon occurrence in this disease.

In most instances, the increase of the body or parenchymatous texture of the liver, in consequence of inflammation, produces, I have observed, a corresponding change on its investing membranes, which are influenced by the general distension, and the symptoms therefore peculiar to membranous inflammation, I have frequently found, exactly resembling those which are predominant when the liver is sensibly enlarged from inflammation.

In laying down the treatment of any disease, general principles alone can be communicated; in every case certain variations occur, which require judgment, experience, and observation in their application; an exact line of proceeding cannot therefore be founded, suited to each constitution and habit; hence the discretion of every practitioner must have much to work on.

In the treatment of acute hepatitis, the general means of obviating inflammation are to be rigidly enforced, by strictly employing the antiphlogistic regimen. After general and copious bleeding, the most early recourse should be had to depletion from the part, by cupping over the region of the liver; this operation should be repeated in ten hours, should the increased vascular action continue unabated, for here no time is to be lost in checking the progress of this violently acute stage of the disease. Where cupping is objected to by the patient, leeches may be substituted, encouraging the bleeding for some time; and, should no material relief be then obtained, general bleeding may again be resorted to, to the extent of twelve or sixteen ounces drawn from a large orifice, to suspend the momentum or increased power of circulation, producing faintness, even to deliquium; this of course must be regulated according to the nature of the case, and the strength of the constitution, and left to the judgment of the practitioner.

Should the inflammation spread itself likewise over the peritoneum, and invest the whole of this abdominal membrane; (which is often known by the patient's being unable to extend his chest without suffering considerable uneasiness, but leans forward in order to diminish the tension of the muscles and integuments of the abdomen:) bleeding must not be lost sight of as our sheet anchor, but must be repeated again and again at no distant intervals, if the disease be not disposed to yield. This

is a critical period of the disease, and one of the greatest danger, it is indeed the very moment, which, if neglected, the foundation of all the miserable sequlæ of the complaint is laid, and if allowed to pass over, evils will accrue, that all our after precautions can never altogether remedy. The modern practice, of large and extensive bleeding, has been found by the most eminent practitioners of late, to be the only successful mode of treatment in this, as in other active inflammations, and it has been observed that small bleedings only suspend for a short period the increased action, without effecting that permanent check which is necessary for overcoming the disease. With these more active measures, should be joined the free use of cooling saline drinks, impregnated with acids; the admission freely of cool air into the apartment, and the use of a low vegetable diet, consisting of gruels, tapioca, and other mild farinaceous matters in a thin form; and we cannot omit impressing it as the result of practical experience, that in this, as well as in other acute diseases at the commencement, a farinaceous or gruel diet should be strictly enjoined, and on no account whatever should animal food be permitted either in broths or otherwise, from its strong inclination in this state of the system to induce a putrescent disposition, and thus aggravate the already septic tendency of the principal secreted fluids. After full bleedings, general and topical, without alleviation of symptoms, a

large blister should be applied over the affected part; most particular attention must be paid to the bowels, and every discharge from them most carefully and accurately surveyed, as it will furnish to the vigilant practitioner information of the highest import, and will convey to him the unerring intelligence of truth, as it regards the character of the secretions. Without this examination, he will be labouring in the dark on matters of the most essential interest to the welfare and security of his patient. This attention is ever required in all acute hepatic cases. Cooling cathartics should be early and freely administered, and every available means exerted to relieve the general distension of the liver, by emulging it of its accumulated secretion, which is a matter of the utmost consequence, and should ever be kept in view by the practitioner: this point will be successfully obtained in most cases by the following forms of prescription:

℞ Potass: Sulph: ℈i.
Ext: Colocynth: Comp: gr. xviij.
Hyd: Submuriat: gr. x.
Ol: Carui g^{tt} ii.

Fiat massa in pilulas viij æquales distribuenda, quarum capiat duas secunda quaque hora, donec alvus probe respondeat, superbibendo cochlearia tria magna hujus misturæ.

℞ Infus: Sennæ ℥ivss.
Tinct: Sennæ ℥ss.
Magn: Sulph: ʒvij.
Syr: Rosæ ʒiij.
Aq: Piment: ℥i fiat Mistura.

When these active measures have preceded, milder means may then be adopted, constituted to regulate the secretions of the bowels and skin, and the formula I have generally preferred for this purpose, is as follows :

℞ Pulv: Tragacanth: Comp:
Potass: Nitr: āā ℈ij.
Pulv: Ipec: gr. ij.
Hydrar: Submur: gr. iv. m: divid: in chart: vi. sum^r: i. 4^a: quaq: hora in gelat: rubr: aut melle.

℞ Magnes: Sulph: ʒiij.
Liq. Ammon: Acet: ℥i.
Syrup: Rosæ ʒv.
Aq: Distil: ℥vi. m: ft: mist:
Coch: magn: iij. unâ horâ post sing: pulv: cap:

This refrigerating treatment I continue to pursue with such variations as the circumstances and the progress of the case require; moreover, the cooling plan should be persisted in for a week, or until the inflammatory disposition is wholly subjugated, and it is decidedly correct that the sulphate of magnesia (or some such like principle) should be continued, in small doses, three times a day, as in the arranged combination ensuing, in

conjunction with the annexed pill, every night at bed time.

℞ Sodæ Carbon: gr. x.
Ammon: Carb: gr. iij.
Mag: Sulph: ℈iss.
Pulv: Trag: Comp: ℈i.
Tinct: Cardam: Comp. ʒi.
Aq: Distil: ℥iss. fiat
Haustus ter in die capiendus.

℞ Pulv: Ipecac:
—— Aromat:
Hydrar: Submuriat: ā ā gr. i. fiat pilula hora somni sumenda.

In those cases, where considerable irritability prevails, after having actively employed the measures of overcoming inflammation, I have found a mild sedative joined with the Magn: Sulph: particularly serviceable, such as the under-mentioned:

℞ Pulv: Ipecac: Comp: gr. iiss.
Magn: Sulph: ℈ij.
Lact: Amygd: ℥ij. fiat haustus quartâ quaque horâ sumendus.

An adherence to this plan for three weeks, will generally secure the recovery, making such alterations in the regimen, &c. as the improvement of the constitution, and the ability of the digestive organs will admit of; holding in strict remembrance, that the diet should be of the mildest description, even long after convalescence has

been established, otherwise considerable risk of a re-production of the inflammatory excitement will be incurred.

Such is the most successful method I can recommend for the treatment of acute hepatitis; a treatment drawn from ample experience, and an early attention to the various diseases of the liver in those climates where they are so formidable and critical. To this subject I was professionally called at an early period of life, and have since unweariedly devoted upwards of twenty years to its investigation.

AFFECTIONS OF THE LIVER.

II. CHRONIC HAPATITIS.

This form of the disease is, by far, the most frequent in Great Britain; it is often, when it appears in the tropical countries, a consequence of the acute species, improperly treated, or too far advanced in its inflammatory progress, before the aid of medicine, and those apposite measures of overcoming its vehemence, are duly instituted; for the most precious moments of efficient action are often entirely neglected, until the unresisted disease has sapped the very citadel of existence.

Whether from the increased tone of the animal fibre in temperate and cold climates, compared with that in hot climates, from the inordinate action of

the liver as a secreting organ in these last, or from both these causes combined, there can be no doubt that in this country hepatitis partakes much more of the nature of simple inflammation, than the same disease does in India, and consequently, the simple antiphlogistic mode of treatment, from this circumstance, will be oftener successful in the former than in the latter variety of disease.

The hepatitis of Europe, or this species, is always slow in its progressive stages; the organ of attack will be, for years, suffering under its undermining influence, and yet no external marks, or strong aggravation of symptoms, pointing out real disease, will indicate to the patient, the alarming state under which he is labouring; any transient symptoms of indisposition that arise, he imputes to a different and mistaken cause, never suspecting that the liver being affected, is the latent source of these occasional disturbed sensations which he experiences: thus misled, it is not in his power to take the necessary precautions, and to guard against this insidious enemy to his repose.

So general indeed, is the prevalence of liver complaints, that I am fully satisfied, that this organ is the chief seat of most of those ailments *unattended by febrile action;* and I venture to affirm, that the grand source of health and disease, is connected with the natural or disordered function of the liver; and that every chronic or lingering illness, arises in a considerable degree from some defect there. In many acute disorders it has also

its share: but in every kind of sickness, whether local or general, that is peculiar to this country, it is material to examine this organ, for perfect health can never be maintained without a strict regard to the completion of its economy. The symptoms of chronic hepatitis, often felt for a considerable time, are so slight, as to be nothing more than a sense of fulness after meals, at times accompanied with a painful sense of distension and soreness of the whole epigastric region, with a disposition to drowsiness, occasionally accompanied with flatulence, tinnitus aurium, and sometimes a sensation of fluttering at the pit of the stomach, and at other times, on the most trifling exertion, the patient feels considerable lassitude and languor, followed by a tendency to sleep: this sleep, however, is seldom refreshing, but interrupted by distressing dreams; slight pain is occasionally felt on either side, but it chiefly fixes itself on the left; to this may be added, that, when in bed, the patient can only lie tolerably comfortable, by confining himself to one side.

The mind often feels ill at ease, becomes capricious, querulous, and is fretful and irritable, from the slightest causes; in some cases also there is a considerable defect of memory, a want of the usual distinctness of ideas, and a general incapacity for mental exertions; the stomach sympathizes in this state, and feels occasionally so disturbed, as to deceive the patient in the supposition, that his complaints arise from an affection of this organ,

while the latter acts only the part of a sympathizing sufferer, affected by its vicinity to the seat of the real malady; the pulse is here seldom accelerated, but is more generally found depressed; yet, in some cases of this disease, I have known the pulse to intermit considerably, either in consequence of the blood through the hepatic artery being obstructed by the enlarged and hardened state of the organ; by an accumulation of it in the branches of the vena portarum, or by bile in the hepatic duct; a dry and harsh skin, with much accumulation of heat, is often a leading feature; but in some individuals, sudden perspirations burst forth from the slightest exertion; lowness and dejection of mind are also usual attendants, and trifles, light as air, seem interesting and burdensome to the unhappy invalid; the bowels never perform their operation, in a proportion equal to the quantity of aliment taken.

The appetite, however, undergoes commonly no diminution; on the contrary, is not unfrequently increased in a preternatural degree, yet, on some occasions, it is diminished, as in those cases, generally, where the system materially suffers; the patient loses that relish for society, which is a concomitant of health, and feels often highly nervous, secluding himself, and ruminating, as it were, over his feelings, which betray a general discomfort both of mind and body; anxiety and languor are expressed in the countenance, which is frequently pale or sallow; often a peculiar dulness in the eyes

is observable, occasionally attended in the morning with such a heavy sensation, that it requires some exertion to open them, and the lids even feel as if there were pressure on them to keep them shut. There is no peculiar thirst beyond natural, yet the tongue will be found furred, more particularly at its base, the mouth clammy and the taste vitiated; the urine is variable, being influenced by many circumstances; in some instances, it is sparing in quantity, and much concentrated, depositing a pink or lateritious sediment; in others, it is abundant and dilute; and such is occasionally the excitability of the organs connected with this secretion, that micturition is frequently distressingly present.

In this state of the disease, sleep is often disturbed, with frightful dreams, and alarming imaginations; or if the patient sleeps soundly, he awakes unrefreshed, with lassitude, listlessness, and sometimes a sensation, as if he were incapable of moving; slight noises generally cause him to start; in some cases there is an obtuse pain of the right side and shoulder, with a fulness in the side and about the pit of the stomach, keeping up constant uneasiness; at other times, there is felt a dull heavy weight of the shoulders, as if confined by a bandage, preventing their free action, and occasioning a distressing feeling in walking; there are often also severe cramps or spasms experienced, and nervous twitchings of the muscles and tendinous parts, and likewise aching pains of the limbs, occasionally

wanting the usual freedom of motion in some of the joints; which shews that the sinovial and other lubricating fluids peculiar to the joints, tendons, and muscles, partake of a vitiated, and often unnatural agglutinous quality, which renders it unfit for maintaining their healthy offices, and for preserving that facility of action required. Where the complaint has continued some time, an emaciation of the face is conspicuous, and in some instances, likewise of the body, and the general aspect of the patient is extremely unhealthy; in many cases, there may also be perceived an œdema or puffiness of the extremities, more particularly at the instep and round the ancle; or instead, a varicose state of the veins is observable, the excretions of the bowels exhibit unnatural colour and odour, are adhesive, of a dark, muddy, and often of a clayey appearance, and are generally voided with difficulty, much straining and discharge of flatus, being usually deficient in quantity; but all these symptoms are generally so moderate, as to be little noticed by the patient himself: Even hepatic abscesses have been discovered on dissection, which had given no inconvenience during life, nor were even suspected to exist, though such abscesses must have been the consequence of previous and progressive inflammation.

In enumerating the symptoms, it would be improper to omit noticing, that in many cases, my patients have complained of a sensation in the throat, consisting of a peculiar kind of fulness, as

if an extraneous body were actually lodged there, with occasionally transient feelings of distress in the adjacent parts. In several instances, an unusual degree of coldness has prevailed in the lower extremities, proceeding from the defective balance of circulation; so severe is it often felt, that it is not to be removed by any addition of clothing, and only temporarily even by the application of external heat.

Nay, it is probable, that even the pancreas and other appendages of the digestive organs, not only sympathize with this morbid condition of these primary parts, but are also themselves in some measure affected, although the degree of derangement is not so easily to be ascertained.

These various symptoms pourtray a true picture of chronic hepatitis, but they do not all appear in the same individual at a time, but shew themselves in different persons, with much Protean variety, both in extent, number, and degree, as the disorder exists in every gradation. Now and then, though rarely, cases do occur, which are peculiarly stubborn and unyielding for a length of time: A case of this obstinate character presented itself some time since, on which my much esteemed friend Mr. Underwood, late surgeon on the Madras Establishment and myself, were called in consultation. It occurred in a gentleman about thirty years of age, son to an East-India Director.

On these symptoms, and the existence of the disease, it is well observed by the late Dr. Paisley,

" that no doubt can arise with an experienced practitioner; if we have not pain to direct us, an experienced touch will discover the obstruction, the tenderness, and enlargement of the liver, I say," he adds, " *an experienced touch*, because it requires a frequent practical examination to satisfy one's self, respecting the different degrees of hardness, firmness, and sensibility, that constitute a disease in that bowel; however, appearances are seldom so equivocal, as to mislead the observant practitioner." In directing this examination, it may be observed, that whenever the diaphragm descends, the liver is carried downwards; and it moves in the contrary direction again, when this muscle passes towards the chest; in the latter state, the thin edge of the liver is completely covered by the margin of the chest; hence, when we wish to press on the liver, we direct the patient to inspire strongly, so that its edge may be thrust below the ribs.

In making such pressure, however, we should not, from this experienced test or *tactus eruditus*, draw too precipitately our inferences as to the actual state of disease of this secerning organ, for it may be at this time so overwhelmed with its own accumulated secretion, as to exhibit higher degrees of morbid condition than really exist; therefore it behoves the practitioner to investigate most diligently every connecting chain of information: it may not be improper also to notice here, that the examination requires to be conducted with some

nicety, in order to obtain correct information; in examining, therefore, the hepatic region by pressure, we should take advantage of that position in which the muscles of these parts are most relaxed; if the patient be placed horizontally, as in bed or on a sofa, then the legs should be drawn up; or if in the upright posture, in that case, he should rest his hands on a table, and lean with his body bent forwards. But in some cases, the enlargement of the liver, with the descent of its margin, is to be more satisfactorily ascertained, by grasping the integuments of the belly, as if you expected to lift up the acute edge of the organ, than merely by pressing with the point of the finger.

The vast number of cases, which have fallen under my care in many parts of India, render me so familiar with this disease in every form, from its most acute state, to its mildest and most deceptive appearance, that I have seldom found any difficulty in tracing its attack, and detecting the true source of the disorder. On the Malabar coast, the disease shews itself in both the acute and chronic state. I made a report of a considerable number of cases there treated, to the late Dr. Hunter, who was pleased, in a public manner, to express, in very handsome terms, his approbation of the successful plan I pursued in conducting the cure.

On the Coromandel coast, I had the same formidable malady to encounter, the termination of which was, in most instances, equally fortunate. When at Mocha, off the Red Sea, so severe was

the attack of this disease on those under my care, that it became requisite to establish an hospital there, for their treatment, and although the range of the thermometer was from 85 to 100, a most unfavourable circumstance for the advancement of the cure, yet the success I met with, far exceeded my most sanguine expectations, in the treatment of such an active disease.

In China, I had an opportunity of observing the liver, secreting its bile, in the most vitiated and depraved state; cholera morbus, and dysenteries, were the chief diseases under my care in this country; and I never witnessed such alarming effects, as the morbid secretion of the biliary system brought on in this situation. The fluid, from its hurried secretion, was not only redundant, but rendered highly acrimonious by the stimulus of heat; and thus, the noxious and highly irritant properties, by re-acting on its own secerning body, have to my knowledge, in many instances, excited the most serious ravages in its own organization; indeed, it is only by witnessing the sudden and surprising relief obtained either by carrying degenerate bile off, by correcting the quality, or rendering the intestines less sensible to its baneful properties, that we can form a due and proper estimate of its active and often pernicious influence on the general frame.

A sensitive association, indeed, so intimately connects all the abdominal viscera, as to render their motions dependant on each other, and thus unites

also the due performance of the functions peculiar to each, in the same intimate chain; hence, the disturbance of the action of the one, necessarily produces a corresponding condition in the action of the others; this is remarkably instanced in the case of the liver, which, as a secreting organ, derives its circulating blood from the stomach, intestines, pancreas and spleen.

Thus, the situation and importance of the liver, occasion every abdominal organ to sympathize with its feelings, and to partake in its state, and thus on the same grounds, every abdominal organ influences the condition of the liver, and their derangements may be considered as a cause of hepatic disease: Therefore, it is of consequence to ascertain whether the anguish of the liver is a primary affection, or a secondary one from a more distant abdominal irritation; this requires the most acute discrimination on the part of the practitioner, and can only be clearly comprehended by often tracing the subject of bilious diseases in their numerous states and complicated varieties.

In several instances I have noticed that patients labouring under chronic hepatitis, are particularly susceptible from the slightest causes to sudden colds about the head, throat, and chest, which occasion a considerable aggravation of the pre-existing complaints, inasmuch as any sudden repulsion of the blood from the surface to the interior of the body, by over-distending the vessels in this morbid and debilitated condition, and

at a period when they do not possess sufficient and immediate power of re-action, (whereby the equilibrium is restored) as in health, must thereby necessarily increase the congestion, and the other causes of obstruction already incorporated.

From such an experience, then, I am induced to draw this strong and practical conclusion, that such is the vast importance of the hepatic functions in the animal economy, and their extensive influence in the general regulation of health, that the least disorder or derangement of its circulation, producing an alteration in its secretion, excites morbid symptoms in every part of the body; that it holds an extensive sympathy with every organ, and what was formerly assigned as peculiarly and primarily originating in the deranged stomach, is more properly to be referred to this viscus, which may be considered as the real physical elaboratory of the whole system.

In order to understand the proper treatment of chronic hepatitis, it will be necessary to consider the various modifications under which the disease appears, so apt to mislead practitioners in this country, who have had little opportunity of tracing it in its several stages and complicated varieties, in which it shews itself under the influence of a vertical sun. With the intention of exemplifying them in as familiar and striking a manner as possible to the comprehension of the general reader, the Author has been induced to divide his work into distinct heads, and would rather be accused

of tautology, than of incurring the risk of being misunderstood. One of the forms in which it often appears in this country, is that of

I. COUGH, ASTHMA, &c.

A DISEASED state of the liver we find liable to affect the adjacent organs, the lungs, and to induce such a derangement in their functions, at one time from mere sympathy, at another from pressure, as to occasion those forms of disease which simulate chronic catarrh, asthma, and even pulmonary consumption itself. The symptoms in fact are the same, only as the cause exists, not so much in the apparent seat of the malady, as in a distant organ, so the means of cure must be applied radically, to influence the state of the former, and restore it to health, before any relief can be expected to the pectoral, and seemingly, the only morbid condition that tends to injure the patient. On medicine being employed, so as to change the morbid state of the liver, the irritation of the lungs will immediately give way, and the disorder will be found, in most instances, to take a favourable turn; for cough is rather to be considered as a symptom of different obstructed states of the viscera, than marking only an affection of the lungs; hence Dr. Cullen has omitted to arrange it among his genera of diseases.

The truth of this I cannot illustrate better than by the narration here of a particular case, in which I was consulted, in the year 1809, with that expe-

rienced practitioner, Dr. Dick, then physician to the Honourable East India Company for the home department: The patient, in this case, had complained for upwards of twelve months of difficulty of breathing, and such impeded and short respiration, as greatly distressed him, accompanied with severe cough, completely resembling asthma; this, indeed, was the decided opinion of several of the most eminent physicians of the metropolis, whom he had consulted.

On a careful examination by Dr. Dick and myself, we entertained no doubt of its being a confirmed hepatic disease, as an evident enlargement of the margin of the liver had taken place to some extent; this occasioned pressure to be made on the diaphragm, thus contracting or lessening the space in the cavity of the chest. Hence, the pulmonary affection was merely symptomatic, and the origin of the evil was to be traced to a different source. The cough induced here, may indeed be termed a cough of necessity, arising from the diaphragm being thrown upwards against the lungs by the tumid liver: this of course excited irritation of the air vessels of the lungs, and, as a consequence also, some inflammation, from which was occasioned an increased and redundant secretion of mucus, clogging up the aerial passages; and the cough in this instance, was merely an effort of nature to pump up, or rid herself of the loaded deposit.

This circumstance shews the nice discrimination that should always be made in pectoral cases, or

wherever cough is the leading symptom; examination should regularly take place of the hypochondriac region, before attempting the treatment, as this would then lead us to discover the source of many disturbances of the general health, which arise in the hepatic organs, and would also direct us to the prevention of many secondary diseases, of a more vexatious, and sometimes of a more dangerous and fatal nature, than those from which they originated; indeed, any distention of the abdomen, in consequence of its pressure upwards, must inevitably impede the natural descent of the diaphragm, or that muscular curtain which separates the cavities of the belly and chest, and thereby prevent the necessary expansion of the lungs; the effect of this will be cough, wheezing, and such difficulty of breathing as would lead many to suspect, that the lungs themselves were the seat of disease, whereas, they are only suffering sympathetically; this will be evident, when we consider that such a degree of excitement is produced by such obtruded pressure on the vessels and glands, as thereby to alter their appropriate capacity and economy, so that instead of secreting mucus of the natural lubricity, intended for the protection of the very delicate structure of the lungs; from this derangement in their functions, their secretions acquire a morbid property or viscosity, by which many of the small lower winding cells become choaked up with the agglutinated collection, whereby that necessary and equable transmission

of air throughout the cellular tissue of the organ is precluded.

This opinion is so strongly and so properly enforced by the late Dr. Paisley, in a letter to his friend, that I cannot omit quoting it here: "I cannot," says he, "avoid putting you upon your "guard against a disorder of the liver, which I "have seen in Europe, and several times in India, "attended with fatal consequences, from its being "overlooked; the disorder I mean, is what may "be called a liver cough; the obstruction in this "case, is pretty generally accompanied by some "degree of inflammation and pain, though seldom "acute, unless pressed with the fingers, or when "the external membrane is also affected, but it "often happens without pain or inflammation; "the cough (the only symptomatic complaint,) "is the misleading symptom of the disease; the "patient pronounces his own disorder a cold, "and it often happens, without further enquiry, "that he is put on a course of ineffectual pectorals, "takes exercise, and shifts his situation for health, "until his liver either suppurates, or becomes an "indolent mass of irrecoverable obstruction. In "very irritable or inflammatory habits, any mistake "on the commencement of the disease is of the "most serious consequence; the liver, diaphragm, "and lungs adhere and suppurate, a purulent spitting succeeds, and instead of a pure uniform pus, "the substance of the liver is expectorated by a "deep hollow cough, in the form of a glandular

" membranous appearance, mixed with purplish " dissolved blood of a parenchymatous look; the " disorder, like all other inflammatory disorders of " the liver, is very tractable in the beginning, by " the antiphlogistic and other means." " It is to " be observed," he farther adds, " that in all con- " firmed disorders of the lungs of any standing, the " liver is always affected; but in this disorder, the " lungs are only the secondary object, and never " give any trouble if the obstruction of the liver " be removed, as in them there are neither tubercles, " nor infarctions."

This connection between consumption and liver complaints, was strongly instanced to me in the case of a lady residing in Southampton-Row, of an extremely delicate constitution; her chief symptoms were violent pain of the side for a considerable time, with an apparently colliquative diarrhœa; from the issue of the case, however, it appeared an instance of highly diseased liver: by the treatment I employed, the discharge of the bowels was gradually lessened, and reduced to the natural consistence and appearance; her other symptoms abated in the same proportion; and by continuing two months under my care, her health was, to the great surprize of her friends, completely restored.

II. MESENTERIC DISEASE.

A CONSEQUENCE of diseased liver is very often an affection of the mesenteric glands, which en-

large, and no longer perform their proper action of secretion; this is a proof that the mixture of healthy bile is necessary with the other fluids of the intestines, either to give that stimulus which is essential to the proper activity of the organs, or to separate from the fluids that part which is to be secreted in the mesenteric glands. A deficiency or vitiated quality, therefore, of the bile, disables these glands from performing their destined offices, thereby superinducing disease, and that oftentimes of the most serious and alarming nature. Though we are unacquainted with the exact economy of these glands, they are certainly subservient to the purposes of nutrition; hence, their long obstruction will undoubtedly operate in producing marasmus, like the rupture of the thoracic duct, by preventing the progress of the absorption of nutritious matters into the natural receptacle, on the due transmission of which the support of the living powers entirely depend.

I cannot here avoid relating a most singular case of the kind, which some years ago fell under my observation; it was in a lady of a delicate and weakly habit, where evidently the whole chain of these glands were indurated and enlarged, and, in one particular part of the abdomen, a cluster of them had augmented to such an astonishing size, as to equal two eggs; this tumour was irregular in its shape, and extremely sensible and painful, on making any considerable pressure on the parts,

so deep was its seat, as to seem, as it were, connected with the very spine.

On this complaint I was consulted with Dr. James Curry, of Guy's Hospital, and her own apothecary, a most judicious and well-informed practitioner: in consequence of the treatment, her health became, first, much improved, and, on my being called in a second time to visit her in the country, I had the pleasing satisfaction, by the directions then given, and the remedies employed in the course of ten weeks attendance, to reduce the mesenteric obstruction, and to restore her general health.

Many cases, somewhat resembling the above, might be adduced, shewing the necessity, which ought to be strictly paid to the regular state of the intestines, to prevent accumulation, as aggravating every liver disorder. When we reflect on the quantity of food that is necessarily taken from time to time, its improper stay in the bowels cannot fail of being highly productive of disease; where the function of the liver is suspended or deficient, and its secretion so sparing in quantity, as not to give the due action to the intestines for its expulsion, or where, even though not in a smaller quantity, it is prevented by obstruction (either through spasm of the duct, a collection of viscid mucus, inspissated bile, or gall-stones) from passing through its legitimate canal, and mixing with the food in its progress through the intestinal passage, the necessary peristaltic motion becomes

then suspended, or incomplete for its natural purpose of clearing the canal; the bowels themselves are thrown into irregular and perturbed action, endeavouring to supply this defect; and thus the foundation of disease is laid through their whole track, the evacuations that take place are effected with considerable difficulty and pain, often giving rise to severe spasmodic contractions of the sphincter muscles of the rectum; as also to an enlargement of vessels, ending in hemorrhoids or piles, not unfrequently attended with prolapsus or falling down of the gut, and which is sometimes with difficulty returned; clearly indicating great obstruction in the circulation through the portal system.

III. STOMACH COMPLAINTS.

An irregular or depraved biliary secretion is certainly the grand source of stomach complaints; the secretions of this organ are materially affected by any morbid state of the liver, and its sympathy with this latter organ induces, of course, a disorder in the functions of the stomach, and a vitiated quality of its natural fluid; hence, we often find a predominant and austere acid, the effect of disease, a leading symptom in disorders of the stomach, and the organ is kept, as it were, in a perpetual state of rapid fermentation; digestion accordingly becomes feeble and imperfect, the matters are poured into the bowels, not in their proper assimi-

lated state, the bowels themselves want their proper supply of healthy bile, and there is no mediating power, or neutralizing agent, such as the bile imparts, to correct the irritation from this cause; such defect gives risc to indigestion, eructation, flatulence, and all the other morbid symptoms, which prove so distrcssing to dyspeptic patients.

In thesc complaints, the left portion of the liver, pressing upwards, is annoyed by the right portion of the stomach bearing against it, which causes irritation, and uneasy sensations to be experienced in the hepatic region, and which are improperly imputed to the stomach; their primary origin being in the liver, and the stomach only the instrument that mechanically excites them.

In this opinion I am strongly confirmed by the following sentiments of Dr. Saunders, in his work on the Liver:—"From repeated observations," he remarks, "I am induced to believe, that the "chronic inflammation of the liver is frequently "mistaken for a dyspeptic state of the stomach. "I have seen many cases of this kind, which have "been supposed to arise from indigestion; the "patient generally complains of pain, which he "falsely attributes to the stomach; and its conti-"nuance is so short, and the degree of its frequency "so inconsiderable, that no alarm respecting the "future health of thc patient is produced. The "relief obtained by eructation and discharge of air, "tends to confirm the opinion that the seat of the "disease is in the stomach; but this relief may be

" explained on the principle of removing the dis-
" tention of the stomach, and so taking off the
" pressure of this organ from that which we know
" is the seat of the complaint."

IV. HEAD-ACHS.

THERE is a very painful species of head-ach, which sometimes renders life almost a burden, and is often attended with considerable giddiness, that owes its attack to a bilious origin. The sympathies of other organs with the liver, we have seen, are very numerous and important, and render its physiology very interesting to the physician. It is indeed connected primarily or secondarily, as cause or effect, with various disorders of the head, as well as of the other parts already noticed. In such cases, the stomach is not affected, the appetite continues as usual, or is even increased, but the bowels are always in a slow state, from the inadequate secretion or inertness of the bile, and as soon as accumulations occur, the attack of head-ach supervenes. This torpid disposition of the bowels never fails to produce such serious and heavy pressure on the abdominal vessels, as to interrupt that harmony of circulation so indispensable to its regular distribution throughout the body; and thus by blocking up the channel of blood through the intestines, it necessarily becomes transmitted in an inordinate stream to the head: As it comes on often periodically, and in fits, it thus differs essentially from

those head-achs which primarily arise from a fulness of vessels, or partial pressure on the brain.

V. LOWNESS OF SPIRITS AND DESPONDENCY OF MIND.

That hysteria, or nervous disorders, as well as hypochondriasis, or the symptoms of a disordered imagination, are often produced by liver complaints, cannot be denied, and a vitiated secretion, or black bile, is proverbially stated as one cause of melancholy; this evidently shews the powerful influence of the liver on the nervous system, and the sympathy produced between the action of the body and the mind; the faculties of which languish, or are roused to unequal strength or morbid acuteness; nay, the irritative debility and feelings of such persons are often indescribable, they are in perpetual terror, and know not for what. To such a length have the deranged feelings, from this cause, often been carried, that suicide has been the consequence, as on the most minute examination of its causes, no other could be traced, than a fault in the biliary secretion, arising from a disordered liver. We cannot trace how easily that fine matter may be wrought upon, which constitutes the medium between the body and the sentient principle; and when, on dissection, nothing but a diseased liver has appeared, we must evidently refer it to this source.

It is probable, that our reasoning is highly erro-

neous, when we attempt to confine the use of the bile to any single operation, as, from its nature, it seems so well qualified to answer a variety of useful and complicated purposes in the animal economy; and from remarks already made in the preceding parts of this work, it must be allowed that the liver is an organ of great importance in the human body, and associated with every other; hence, it is not only liable to derangements, which are indicated by the presence of appropriate symptoms, but very often distant organs are affected, when the source of the complaint is in the liver itself, which shews its general influence, as whatever harasses the mind or depresses the spirits, never fails to additionally distress it: hence the propriety of the poet's prayer for the "mens sana "in corpore sano," and this we have shewn can only be obtained by a proper regulation of the functions of the biliary system, which equally influences the immaterial as the material part, for every thing, in short, which disturbs the equanimity of the mind, interrupts, as we have seen, the healthy functions of the liver and chylopoietic organs, which in their turn re-act on and aggravate the mental perturbment.

VI. CHRONIC DEBILITY OR WEAKNESS.

A GENERAL debility of the system is not unfrequently met with in practice, which resist what are considered the most powerful tonic and resto-

rative remedies; wherever this happens, a latent hepatic obstruction is generally the foundation of the malady, and its mode of acting may be easily explained; the absorbents, from a want of the proper stimulus, the bile, become languid and incapable of operating with sufficient energy to prepare chyle in the quantity necessary to nourish the body; and perhaps also, what they absorb is of an inferior quality: in this case, though the appetite, and even the aliment taken into the stomach be increased, still it lies a useless load, until the liver is roused, and enabled to perform its functions, by secreting and imparting its fluid in sufficient quantity and quality to answer all the purposes for which it is by nature intended: no traces of chyle are discoverable in the chyme, until after its intermixture with the bile, and therefore it requires this fluid to enable the lacteal vessels to take up that nutritious part, capable of renovating the impaired powers of the constitution.

It was remarked very early by Lord Bacon, and with much truth, "that the bile is the incentive "and stimulus of many functions of the human "body;" and he considers that "its healthy state "entirely depends on the quantity and quality of "this fluid."

Thus we may remark, that muscular action, and nervous energy, depend very materially on the due degree of tone and vigour in the stomach and bowels, and whatever interrupts their functions, produces great prostration of strength, and dejec-

tion of spirits; for all the abdominal viscera, except the kidneys, are exercised in the digestion of our aliment, the conversion of it into chyle, and the extrication of the residue; hence the defect of the one, particularly of so important an organ as the liver, is most sensibly experienced, by inducing that series of exhaustion in the glandular economy as to be productive of serious debility throughout the whole system; for how, where the hepatic, the gastric, and pancreatic fluids are all vitiated and depraved, is it possible that healthful nourishment can be prepared? The food in such cases affords insufficient support, as it cannot pass into blood suitably assimilated to recruit the defective juices, so as to replace and replenish the continual waste and wants of the general frame. The debility thus induced is to be repaired, not by administering, what are usually termed strengthening remedies, but by first taking off the primary and exciting cause of the malady, as situated in the constrained function of the liver; which accomplished, the heart recovers its action, the brain its energy, the nerves their sensibility: the grand obstacle once removed, the subordinate springs of life presently resume their respective movements; so true is that maxim, causa dempta tolitur effectus.

VII. OF FLATULENCE.

Wherever flatus, or wind, is generated in copious quantities in the stomach and bowels, and

where, from its abundant presence, it produces considerable distention and general uneasiness, from the extensive pressure which such gas sometimes occasions in these parts, and which are oftentimes, as it were, swollen, stretching the whole fibres of the body; it may be considered as originating, and as a constant accompaniment of a disordered liver; indeed, such accumulations of air cannot take place but in those constitutions where the biliary and gastric fluids are secreted in the most inert, imperfect, and altered condition.

Flatulence is too often regarded as the mere mark of a nervous disorder, and therefore overlooked; but, on the contrary, wherever it occurs in an excessive degree, it should always be considered, not only as indicating a faulty state of the important fluids, on which the continuation of life and health depends, but likewise as producing in the organs it affects, such a state of progressive irritation and pressure, as occasions its grievous effects (by vascular interruption) to be extended to the primary parts, connected with the very principle of existence.

Therefore, whenever flatulence proceeds from this cause, the re-establishment of these important secretions, which are in a corrupt and defective condition, must be the primary object, the secretion of the biliary and gastric fluids, in this case, are evidently of a critical nature, and flatulence, though often viewed as a trivial symptom, is, at least a proof of its morbific tendency on the

stomach and bowels, which is further evidenced by the often sour eructations, the putrid and hot bourborigmi, with which this symptom is frequently attended. At times, indeed, so far from being trivial, it constitutes a symptom of great and urgent distress, requiring immediate alleviation; and I have known persons so troubled with it, that it has continued for hours, with almost a constant fit of belching, and noise in the bowels, coming off in astonishing torrents, even in the empty state of the stomach, so as to render them almost ashamed to go into society; this disengagement of gas decidedly demonstrates the predominance of the chymical over the animal powers: thus flatulence, from the above causes, is particularly apt to affect females at a certain stage of life, when the secretions in general become irregular, and that of the liver particularly so, for, from the complex nature of the organ, it seldom escapes suffering as well as those organs which undergo their stated changes at this determined period.

VIII. MORBID SENSIBILITY; SUPERSENTIENT FEELING; EXCESSIVE SUSCEPTIBILITY, OR NERVOUSNESS;—CONSTITUTING DISEASE.

A FREQUENT derangement connected with the liver and its secretion, acting on the nervous system, is a disordered or exquisite sensibility of the nerves; the impression thus communicated, pro-

duces the most keen sensations of an unpleasant nature; the patient feels himself in a situation of indescribable distress, for which he cannot account; every part of the system seems with him ill at ease, and often his sufferings rise to that alarming crisis, that no language is capable of conveying the degrees of horror and misery under which he labours, his apprehension pictures every thing in the blackest colours, and his mind, bereaved of its former tranquillity, is the seat of fears and forebodings; he becomes the creature of torture from the slightest and most trivial causes, his days are literally days of pain, and his nights, nights of anguish; his temper irritable and perplexed, is driven to passion by the slightest opposition, and the simplest circumstance acts upon him with such poignancy as to drive him at times almost to despair and madness: no subject affects him so much as his own health; to this, he is tremblingly alive with the most awful apprehension, and the idea of death hangs perpetually on his bewildered imagination.

The cause of such a perturbed excitement on the nervous organism, almost invariably results from some momentous derangement of the biliary system, the secretion of the bile obstructed, and the organ with its relative appendages distended and enlarged by its retention, produces a morbid pressure on the contiguous nerves; its effects are thereby instantly extended over the general frame, from that intimate sympathy of communication

which the affection of this sensitive part naturally induces in its delicate web of organization; and likewise from the acrimony which the abridged quantity of bile that passes acquires from improper detention, exciting much irritation in the general system; the proofs that such pernicious and highly morbid excitability is effected by this cause, is visible from the happy relief which a regular performance of the biliary functions has on the body, for the moment this desideratum is completely re-established, the patient's terrors subside, his previous acutely nervous impressions are removed, the character of gloom and despondency is reversed, and his natural disposition and feelings restored. From not being duly circumspect and searching into the true and primary spring of the morbid agency of bodily indisposition on the mind, renders the maladies of the latter so little within our knowledge, and so abortive to the attempted measures of renovation; but were we uniformly attentive to mark the bodily changes that attend or precede nervous affections, however trivial these bodily changes may apparently appear, we should then be enabled, knowing the foundation source, to afford effectual relief in most cases of such disorders, which are at present so alarmingly afflicting to the patient, and often so inscrutable to the physician.

The author in all cases of such complaints, invariably fixes his attention to the process of the liver, and the action of this organ on the ner-

vous filaments immediately connected with its economy and its appertaining connexions; by thus directing his views, he has on the most solid basis been empowered to restore those who have suffered for years under the pressure of such harassing and distressing calamities, accompanied with such morbid sensibility and excessive susceptibility, as have often rendered them obnoxious to themselves, unfit for society or any useful purpose in life; for he contends, that it is not so much the imperfection of medicine that so often subjects the practitioner to defeat, as from his forming erroneous data, and overlooking altogether in many instances the derivative cause, and considering that in which the root of the evil is too often implanted, as too unimportant, or beneath his reflection.

IX. REMARKS ON THE BILIARY SECRETION.

It is impossible to convey in words the great varieties, the strange changes and alterations which are often displayed in the character and appearances of this secretion; and these aberrations, in colour, taste, smell, and consistence, indicate I am convinced, a difference in quality; however, I shall attempt to describe such leading circumstances as arise, and are most frequently observed: thoroughly to appreciate and to draw practical deductions from the valuable information they convey, can only be the result of experience de-

rived from assiduous and vigilant application to the subject.

In many hepatic obstructions, the functions of the liver remain so torpid and inactive, as to resist, for a length of time, the influence of remedies, and when roused from its indolence, it often happens, that the first efforts it makes are depicted by a dislodgement and discharge of a liquid dark bile, resembling coffee-grounds diluted, and occasionally a fluid of a still darker colour, not unlike the appearance of ebony or jet; this is generally a full and satisfactory evidence of the organ's acquiring energy, or endeavouring, as it were, to empty itself of its improper collection, which should at all times be viewed as a most favourable omen: it sometimes will go on making similar discharges for a short time, and then after the complete disgorgement of its long collected and vitiated fluid, the organ thereby becomes restored to that ability of secreting bile of a more healthy quality. We most usually observe the amendment of our invalid keeps pace with the improved condition of this secretion; for, I have almost invariably found, in affections of the liver of long standing, that where this discharge was kept up for several days, the patient gradually recovered, and generally obtained that state of health, to which he had long before been a stranger.

I very often, in the course of my experience, have had occasion to remark, that the biliary secretion has for some days shewn itself extremely viti-

ated, and then for many days after, none whatever could be discovered: in these cases, we should not rest satisfied until the liver is enlivened and acted on, in such a way as to shew some steadiness of principle: at other times I have observed, the contents of the bowels will often resemble mud, or a matter of that well-known darkish colour, and wherever I have seen this sort of dejection unalterably continue for some time, the case generally has assumed a stubbornness of character, and has required the excitement of considerable energy, in order to rouse the lethargic liver to its pristine functions.

Under such circumstances, it has generally been a symptom of direct benefit, when my patient has complained of some glowing, or diffused heat in the region of the bowels, attended with a nipping and griping effect, which symptom recurring two or three times a day, leads me to augur favourably of such an occurrence, as it convinces me that bile, in no very sparing quantity, is poured into the intestines; and I have scarcely ever been deceived, in finding the excretions at such seasons, amply provided with this fluid: should this diffused heat and griping continue for a week at intervals, it has uniformly afforded me firm grounds, for a favourable prognostic, as to the speedy issue and recovery of the patient.

But, in other instances, the discharges from the bowels will display all manner of character and depravity as to colour, consistence, adhesiveness, and the like, sometimes are spongy and frothy,

resembling clay, gruel, pitch, yeast, bees wax, cheese, suet, sour grains, fæces of red wine, washings of flesh, membranous filaments, a ferruginous appearance, greasy and grey, a dirty green, and many other varied shades of colour; such properties constantly indicate a faulty biliary secretion, and until the liver is (if I may be excused the expression) spurred to its proper function, the condition of things remains the same; but the moment any perceptible effort is made by it, a beneficial change becomes evident, and our great anxiety should be to keep alive its interest, by which means we shall speedily be gratified with the secretion of healthy bile; but seldom or ever does this effect arise, without the previous warning symptoms of occasional heats, and gripings over the bowels; and when we discover this correct bile, we should proceed with delicate caution, not to frustrate or annoy the organ too much, as now we must, in a manner, rest on our oars, having gained our desired object; for an excess of stimulus at this juncture would defeat our endeavours.

In all disorders of the liver of any standing, where this viscus has long been sluggish and inactive, it may be considered as a certain fact, that when roused into intense action, the first secretions it throws out, are always in an ill conditioned state.

Where the bile passes of a bright yellow appearance, resembling the yolk of an egg, it is to be regarded as belonging to its healthiest condition.

When bile passes the intestines in any quantity, in those constitutions which have been deprived of it for any length of time, (I mean in those instances where the quantity previously has been so scanty, or the quality so dilute, as by no means to render to the bowels that due physical assistance required;) I have invariably found it to occasion considerable burning heat at the rectum, like the sensation caused by some scalding fluid, which generally lasts some minutes, and previous to the discharge, those gripings and glowing heats over the bowels already noticed, usually take place as the forerunners of it; a strong proof of its acrid and caustic nature, acquired from long and protracted retention.

In observing what passes by the motions, I have often perceived great quantities of solid matter resembling coal dust at the bottom of the vessel, and wherever this has continued to pass, I have generally found the case obstinate and unyielding for a length of time: On examining this matter carefully, it has proved to be inspissated bile, such as the ducts are apt to be clogged with in those constitutions, where the organ has been sluggish and imperfectly performed.

I could wish to expatiate further on this subject, but words cannot correctly convey that practical information which I am desirous to communicate; this must be the result of individual experience alone.

I am well aware that the liver is occasionally subjected to great difficulties, such as having its

ducts obstructed by glutinous or inspissated bile, gall-stones, viscid mucus, tumors, or contractions; yet, I am firmly convinced, the constitution more frequently suffers from a torpid, inactive, and indolent condition, than from the reverse, where its action is in excess, and its functions carried on too rapidly.

X. REMARKS ON THE GASTRIC FLUID.

It has been considered, that the presence of bile in the stomach is the source of the derangement of this organ, though, from anatomy, it is clear, that this fluid never passes into the stomach without such violent exertion of the organ, as is occasioned by the act of vomiting, or where the biliary secretion is prevented from getting into the intestines by its natural channel.

In bilious disorders, or liver complaints, there can be no doubt that the fluids of the stomach display a yellowish appearance, and have a bitterish taste, the consequence of a vitiated, and altered property; but it is evident that this state can be produced by sympathy alone, and the liver, in a morbid condition, or under disease, is as capable of exciting it as the uterus, an organ still more distant, whose effect on the state of the stomach in early pregnancy, is well known and admitted.

In fact, such is the nature of the stomach, that it may be considered as the centre of all sympathy, and influenced by the derangement of every other organ of the body, as well as of the liver, without

any necessity for having recourse to the supposition of bile being mixed with its contents, in order to their acquiring a faulty or unhealthy condition.

The interruption of digestion then, in all cases, occasions the solvent fluids of the stomach to be changed in their colour and nature, which changes, indicate that the acid produced from the fermentation of the food has not been neutralized, and incorporated into the new composition, or combinations which take place, where the health of the organ is unimpaired; the food in the stomach is never thoroughly digested, or converted into chyle; it is here only a preparatory process, which is perfected in the duodenum, and this perfection or real assimilation, cannot be attained until it receives the admixture of the bile to animalize it.

The bile, in fact, is the most animalized fluid of the system, as it is formed from blood which has passed through the general circulation, without being renovated, or receiving that oxygenous principle from the air, which is essential to its vitality; a portion, therefore, of this most perfect, or complete animal matter, is required to be mixed with the chyme, as it descends from the stomach into the duodenum, to give the real animal nature to the newly formed production, or chyle: Hence, where it is suspended from an obstruction of the liver, the body is deprived of its proper nourishment, and becomes emaciated, and the food received has not its useful parts separated as it ought.

The proofs, that bile does not enter the stomach naturally, may be drawn from the appearance of the contents of the stomach, which are generally of a yellow, and not of a green colour, when discharged by vomiting, and next the presence of acid, which never can be the case along with bile, the latter proving the grand neutralizer of this principle: The effect of bile, on acids, in producing a deep green colour, is strongly instanced in the early bowel complaints of infancy, and in the same changes which it invariably shews by its incorporation with acids out of the body; this appearance being never displayed in the actual contents of the stomach when first discharged; for the presence of bile is only witnessed in the last efforts of vomiting, and, on being pumped up into the stomach, it becomes mixed with some remaining portion of acid, and thus imparts to it a geen tinge which it would not otherwise possess; for green discharges never appear with the first matters thrown up. The presence of bile in *this* organ, except as in the manner already stated, is, therefore, founded in error, resting on no solid basis, and opposed by fact, analogy, and experiment.

XI. OF THE INTESTINES.

The liver and alimentary organs, we may observe, reciprocally partake of each other's diseases, and indeed, next to the hepatic system itself, there is no part of the body, where the influence of the

bile is so extensively felt as in the intestines or alimentary canal. The intestines are composed of a muscular tube, of various diameters in different parts, forming two arches, the one large, loose, and floating in the abdomen; the other smaller, and connected by appendages, in a fixed state to the back, and sides of this cavity; their length is six times that of the body, and they are every where interspersed with vessels, glands, and nerves, suited to their appropriate offices; they are possessed of two kinds of action, the one termed their peristaltic motion, the other that active exertion which is caused by the evacuation of the fæces; the first is the means employed by nature, to perfect the process of converting the aliment into chyle, and to expose it afterwards to the mouths of the vessels destined to receive it; this is a slow, gradual, and never ceasing operation; while the latter is violent, temporary, and coercive.

On the proper regulation, however, of these two operations, much of the health of the system depends. In many constitutions, the former is impeded by a morbid accumulation of mucus, which nature originally intended for the protection of the delicate surface of these parts, from the too great irritation, which the bile, and pancreatic juice, in mixing with the aliment, are, sometimes, apt to produce; this accumulation of mucus, in case of disease, requires much attention on the part of practitioners; it impedes the action of remedies, renders the bowels insensible and torpid, fre-

quently locks up the biliary and pancreatic secretions, and prevents their passing freely into the intestines: by such obstructing causes the aliment is deprived of the very principle from the bile, which should be conveyed to it, and the chyle is therefore deficient, we may infer, in those essential properties, so exquisitely demanded for the reparation and due support of the constitution. If, unfortunately, the obstruction should become total, the body would unavoidably waste and decline; for it may be laid down as an established truth in physiology, that without bile, neither digestion, nutrition, nor the excretion of the fæces can be requisitely performed.

In all cases, a separation of this mucus from the intestines, is an object of importance which requires to be particularly attended to, as it differs from mucus in other situations, and often acquires a glairy gelatinous consistence, of the most viscid and tenacious kind: The difficulty of removing it can be known only to those, who have paid a proper attention to the subject, and repeated purgings will hardly be sufficient, in many cases, to separate it from its attachments, particularly when pent up and confined to certain portions of the intestines, where the folds and windings favour its retention.

The action of the bowels to evacuate the fæces, where the liver is defective in function, becomes a most coercive or violent operation, and in many cases, where extraordinarily exerted, it has produced the most serious consequences in occasioning rup-

ture, hemorrhage, apoplexy, &c. Nature certainly intended that this operation should be done with ease and safety; and it is only in cases of disease, or from inattention on the part of the person himself, that it can be attended with danger, inconvenience, or pain; it is clear that the bile is formed by nature for rendering it an easy operation, that fluid being the grand saponaceous compound to mix with the refuse of the aliment, and by this mixture to give the proper stimulus to the intestines for its discharge: But this stimulus is insufficient, unless the hepatic and cystic bile be united to excite the necessary action of these parts; for by the saponaceous and soluble quality it possesses, it lessens the adhesive nature of the fæces, and by smoothing their surface, facilitates their evacuation, for in cases of its defective secretion, the fæces are hard, knotty, and irregularly formed. It may, however, be remarked, that this may be retarded, or a costive habit of the body may proceed from these various causes, viz. from a failure, defect, or obstruction of bile, or its not being sufficiently exalted to stimulate the intestines, and quicken their expulsive motion.

A deficiency, or an excess of bile, therefore, will be equally injurious, and produce distressing effects on the constitution concurrent on such irregularity. The excess of bile in this climate, we have seen is not so frequent as its suspension or deficient state; but where this does recur, it produces a powerful spasmodic action of the bowels, and often

occasions a morbid change of structure of the most serious consequence; from a deficiency of bile is induced, first, a languid action of the bowels, as well as an increase of acrid and often black mucus; unnatural accumulation of fæces next takes place, in certain portions favourable to the retention of matter, particularly in the sigmoid flexure of the colon. The action of the bowels is occasionally exerted to inordinate action, producing rapid contraction, but not with sufficient effect to get rid of the embedded and encumbered load they contain, and the muscular fibres of the rectum are thus kept in a constant state of irritation and ineffectual exertion, obliging the abdominal muscles to be forced into preternatural action: the result of their strong contraction, is, that more blood is propelled by the vessels of these parts into the rectum and other pelvic viscera, than their economy can duly dispense with; hence, their coats being over distended, by degrees become varicose, and occasionally give way: at other times the membrane of these parts becoming relaxed, is liable to fall down in folds, thereby occasioning very serious and painful obstructions in the passage: we sometimes also find a thickening at particular parts of the canal, laying the foundation of stricture, a disease of a most alarming nature, and incurable, unless within the reach and where the assistance of the surgeon can be administered.

The frequency of this disease, and of long and indurated accumulations in various parts of the in-

testines, is proved by dissections; that these arise from the deficient and unhealthy secretion of bile cannot be doubted, when we find a due distribution of this secretion, the means nature employs for eliminating the canal; its importance, therefore, in the economy cannot be too strongly insisted on. The functions, indeed of digestion, both in the stomach and upper tract of the intestines, are very improperly performed, and the long continued irritation to which the bowels are subjected, comes at last to debilitate their tone and action, whereby they do not sufficiently propel their contents; and fresh accumulations and congestions are again and again formed, one train of evils leading on to another, which, as they settle lower down, are not unfrequently productive of serious mischief, by requiring an improper degree of muscular force for their expulsion, thereby bringing on a diseased state of the lower portion of the tract, particularly of the rectum, with often an abrasion of its lining membrane; these abrasions lay the foundation of further inflammation, tumours, fistulous openings, and other consequent affections of the gut.

In all hepatic cases, strong conclusions may be drawn from the alvine operations, and the manner in which they are discharged, their appearance and consistence; wherever they are carried off with much straining, when the matter is scanty in proportion to the food, when it is small and apparently figured, or much compressed, or curled round, resembling a cork-screw, when great ineffectual and

painful exertion are exercised, with only a discharge of wind, and where the evacuation is frequently with a sputtering, or squirt, and the patient feels tight and banded about the body; under all these circumstances, a diseased state of the intestine is to be suspected, and should be ascertained by a careful and minute examination, which the practitioner ought never to omit; as there is no disease to which the human frame is incident, that is more liable to remain undetected.

This examination will most generally shew either a thickening of some part of the rectum, or an actual stricture formed in the passage, and it cannot be too much impressed on the mind of every practitioner, that the presence of the above symptoms affords always a certain indication of an altered structure or morbid change in the passage. The earliest means of ascertaining this should never be neglected, as it is only by early detection that effectual means can be employed to accomplish a cure; indeed, until the state of the intestine is changed it will be impossible for the liver to perform regularly its functions, for though the bile may be poured out and mixed with the feculent matter, the stricture of the intestine will cause it to be retained, and accumulations will continue, which the natural action of the bowels cannot overcome, to render the discharge regular and free.

In the course of my practice, when attending particularly to the alimentary excretions, wherever for a length of time I have observed large collec-

tions of yellow heavy mucus to pass off in the shape of long continuous stringy matter (oftentimes resembling the inner coat of the intestine itself) attended occasionally with a rumbling noise as of air circulating through the bowels; such symptoms most generally have led me to conclude that a diseased condition of some portion of the intestines had accrued.

In several cases, such has been the immoderate accumulation of indurated fæces from intestinal torpor, that at a particular part of this canal they have been so completely aggregated into a mass, so as to entirely wedge up and distend the intestine, thus, forming into a kind of substance much resembling a solid tumour, both in its feel and in its sensible properties when pressed on. Such like apparent tumours I have known to be formed in different parts of the abdomen; this appearance has often deceived practitioners, and it is not to be wondered at, from its occasioning by its irritation on the surface of the intestine, considerable inflammation and pain, the same as any other active mechanical cause; such peculiar circumstances of disease, often the accumulation of months, when once detected, require an active and energetic enforcement of medicine, and shew the necessity of nice and accurate discrimination, in order to form a correct judgment of the real nature of such appearances. Unless a practitioner be placed on his guard in this respect, he may often be misled by such phenomenon, viewing this stercoraceous

collection as a tumour of a very different nature, nor is it less necessary when the obstruction is once removed, that a proper attention be kept up to prevent the recurrence, which can only be done by relaxing the biliary system, or in other words, unfettering the liver, to the exercise of its native capacities, so that the sparing secretion of bile may be amended, and that harmony of function restored between these parts, so indispensably essential for rendering the alimentary canal equal to the task of upholding by its own powers its own functions.

XII. ON GALL-STONES, BILIARY CONCRETIONS, AND JAUNDICE.

In addition to those numerous disorders which have already been so fully detailed as attending a morbid secretion of the liver, it would be improper to omit mentioning that a faulty condition of the bile is likewise the cause of gall-stones and biliary concretions; these obstruct or plug up the biliary ducts, which preclude the passage of the bile through this natural channel into the duodenum, and lay the foundation of jaundice, a disease at all times formidable and alarming; (to so wonderful an extent has this formation of gall-stones been detected, that the late Dr. William Hunter, in his lectures, recited a remarkable case of a young woman, in whose gall-bladder were found 1,100 gall-stones.) In this disease the secretion is thrown back upon the organ, and the absorbents are roused

to increased action as an effort of nature, the system having no other alternative but through the medium of these vessels, of unloading the impounded liver; thus circumstanced, the fluid necessarily first becomes diffused through the circulating stream, and forthwith pervades the most minute secretions, giving a yellow tint, and shewing its general influence over the whole body.

We may here observe, that cases do occur, though very rarely, where the inflammation of the liver, extending to the gall-bladder and ducts, has occasioned a thickening of the coats of the canal, from whence its diameter has become so straightened, as ultimately to cut off the passage of the bile into the duodenum: this of course gives rise to irretrievable jaundice.

Bilious congestions are often found diffused in the substance of the liver, or pori biliarii, and the roots of the hepatic duct, gorged with clotted bile; hence the numerous cases of small gall-stones observed in the substance of this viscus, and wedged in the duct near its origin.

The complaint of gall-stones and biliary concretions requires the most prompt and active remedies to obviate the agonizing distress which often attends it. These sufferings may, it is true, be allayed, and the present fit or paroxysm got over, by the passage of the stone or biliary concretion through the ducts, which are capable of dilatation to a certain extent for its expulsion; (for although the diameter of the gall duct is naturally

a little larger than that of a goose quill, such is its structure as to admit of dilatation, and allow gall-stones to pass which are equal in size to a pigeon's egg, and sometimes much larger, of which many examples may be found in authors of undoubted veracity.) Yet no firm or permanent state of health can be ensured until such appropriate and attenuant means are employed as are capable of removing the morbid density of the bile, or its tendency to inspissation, and to restore to the ducts their tone and elasticity; for, unless a change be produced, the same attack will assuredly recur, and the gall ducts, from the long and repeated distension of their coats, gradually lose their contractile powers, as ultimately, by such continued oppression and suffering, the canal becomes wholly exhausted and occluded with the impacted gall.

It has been already stated, that the calibre of the gall duct, though small, frequently allows stones of pretty large dimensions to pass, at times, almost exceeding belief; but it cannot be denied, that now and then a fatal termination of a case will arise, wherein the stone has been incapable of passing on; a rupture of the duct ensuing from this cause, proved mortal to the wife of a gentleman of the faculty in this metropolis some years since.

In all cases where the secretion of the liver is of this sluggish and inspissated nature, the patient cannot be too solicitous in having an early recourse to the mode of treatment so strongly pointed out,

and in assisting the operation of the remedies by a strict attention to diet, exercise, and all the other auxiliary means enjoined in the latter part of this work.

XIII. ON DROPSY.

This formidable disease is too often the termination of liver complaints, when left to themselves, inconsiderately or incorrectly treated, for, from previous and unrestrained inflammation, it may have suffered in its structure to such an extent, as to produce a considerable impediment to the equable transmission of blood by the vena portarum; which interruption occasions more fluid to be poured out by the exhalent vessels, than the ability of the absorbents can remove; whence arises an effusion in various cavities, but chiefly in the abdomen. Where this symptom appears, it may be considered as indicating a general breaking up of the constitution, and though in no case is a patient to be given up, it affords but a melancholy presage, both to the practitioner and to the invalid: the latter unfortunately too often supposes this as his only complaint, and that, if he could once get rid of the accumulated fluid, then he would be well; the practitioner, indulgent to his prejudice, evacuates the water, which affords but transient and temporary relief, when a few weeks shew the accumulation as great as ever, and the miserable patient becomes a victim of disap-

pointment and chagrin: to this may be added, that the weakness induced by the removal of the fluid, too often hurries on the fatal event sooner than it would otherwise have happened.

Dropsy from a diseased liver commonly discovers itself first in the form of ascites, where the fluid occupies the cavity of the abdomen: paucity of urine is here the leading symptom, as in other cases of dropsy, and the skin possesses also the same dry feel, and anserine appearance. The urine is not merely high coloured, but displays a real bilious tinge. It is not until the circulation of the liver becomes highly obstructed, that the effused fluid is known to accumulate; when the pressure on the venous system is so great, that the absorbents can no longer carry on their office of removing the fluid poured out in the usual proportion as in health; then it must be deposited in the surrounding cavity, and a collection gradually forms: this collection, when it arrives at a certain length, increases all the morbid symptoms which attend the original liver disease; the affection of the stomach from the pressure of the fluid confining the situation of the organ, becomes aggravated; the same occurs in regard to the lungs; and the dyspnœa, or difficulty of respiration, particularly when in the recumbent posture, is often truly alarming, the sleep is highly disturbed with frightful dreams, and in the end, the fluid confined originally to the abdomen, is diffused also into the lower extremities, which acquire a prodigious size, and also ascends to the

chest, producing hydrothorax: frequently in these cases, besides the liver, other parts of the abdominal viscera become eventually diseased, and scirrhous tumors of the mesentery and pancreas form, which by pressing on the vena portæ, or great vessel of the liver, increase the dropsical symptoms by impeding the circulation of the blood through the vessels of the abdomen, and thus occasioning the thinner parts of it to be poured out by their exhalent extremities.

The pulse under these circumstances of dropsy, is intermittent, and the action of the heart highly irregular; the oppression and sense of suffocation, reduce the patient to a most dreadful state, and every night is, for a length of time, expected by the attendants to be his last; life, however, even under this dreadful aggravation of disease, is often long protracted, until the unhappy sufferer is equally a burden to himself, and to his surrounding friends.

In directing the treatment here, the plan recommended for the cure of the liver complaint, (the origin and cause of these secondary symptoms) is never to be lost sight of, but with these means are to be used such others, as may remove the pressure of the accumulation, by exciting the action of the absorbents, and causing the kidneys and other emunctories to perform their functions, in a degree beyond the usual standard of health. The operation of tapping seldom affords permanent relief; in the early stages it is more likely to answer

best, because then, there is a chance that the parts may recover their tone; but when the disease is so far advanced, that the parts are unable to regain their energy, it generally accelerates the termination, by removing that remaining firmness and elasticity, which they acquired even from the pressure and distension of the fluid, acting as a mechanical stimulus upon them; the cure, therefore, is to be effected only by an energetic use of the remedies calculated to remove the primary malady, for without this all other applications are in vain; the prejudice of surgeons in favour of operating in such cases, is often to be highly reprobated as injurious to the patient, and adding no eclat to themselves.

Dropsy will never arise in liver complaints, where the treatment recommended is early and zealously adopted, and this should be one strong inducement for patients to pay an early attention to themselves. Here the precept particularly applies,

> "Principiis obsta, sero medicina paratur,
> "Cum mala per longas convaluere moras."

TREATMENT OF CHRONIC HEPATITIS.

Having thus explained the principal forms of hepatic disorders, shewing the extensive influence of the liver in the production, aggravation, and

fatality of disease, we now come to consider the principles to be laid down in the treatment, the most important part of the whole. Chronic hepatitis, we have stated to be the most frequent in this country, and proportionably as general as the acute in India; it is slow in its progress, and deceptive in its appearance; nay, it will continue for years without the patient being aware of its existence, or its unfolding such characteristic signs as may induce even a practitioner, to suppose that the ailments of the invalid owe their origin to this source.

From this view, there can be no doubt that every one will on reflection, consider the disorders of the liver to be of the first importance, and will perceive the propriety of assiduously enquiring into their nature, in order that he may know when they exist, and that the efforts to remedy them may be conducted on rational principles; indeed, nature will in all cases do much to resist or obviate impressions that are hurtful, provided she be correctly assisted in her exertions, and not frustrated by rashness and inexperience: a caution which cannot be too strongly inculcated in the treatment of all chronic cases.

The state of chronic hepatitis, is materially different from that which marks the acute. While in the latter, a copious and morbidly increased secretion of bile prevails, tinging the skin, and working its way into every vessel and pore; whereas in the former state, the reverse of this is ex-

hibited, the slow and weakened circulation of the organ lessens the secretion in the same proportion, and thus a deficiency of bile, by depriving the alimentary canal of its proper quantity of this necessary and natural stimulus, renders the constitution subject to a morbid influence, with equal power, as its redundancy in the former condition: This opinion, nearly new in practice, is confirmed by ample and conclusive experience, though contrary to the received notions of many of the profession of this country, by whom it is supposed, that all hepatic disorders owe their origin to an excess, rather than to a deficiency, of this active excrementitious fluid.

In all hepatic complaints, in order to ensure a successful practice, the first point is to understand accurately the state of the disease, and this is only learnt by a skilful examination of the secretions that pass by the stomach and intestines. This is a point of incalculable importance, and which has seldom been sedulously attended to by practitioners, but is of the first consequence if properly considered: in all cases where the hepatic functions are slow or impeded, the contents both of the stomach and bowels, acquire a vitiated state; in the former, there is a faulty gastric secretion, mistaken for bile; in the latter, there is a heavy, adhesive, glairy, and vitiated mucus that lines the intestines, of a most tenacious consistence, which prevents the regular action of these organs, and the formation of chyle

in its proper state and quantity from the aliment received.

It may be observed in all cases, that the retention of fæces longer than is natural, by distending the alimentary tube, will weaken its fibres, and otherwise give rise to a perturbed action of the several order of glands here situated, and from the pressure it also occasions on the contiguous viscera; obstruct the circulation, and prevent that free and equal distribution of blood through their several vessels, which is necessary to support the secretions, and maintain the balance of the general system. These facts should have a material influence in directing a just and successful mode of proceeding; they are like beacons to the mariner, and point out a safe steerage and fortunate passage through the dangers of hepatic disease, because, if timely attended to, they will enable the practitioner to form an accurate prognosis on their progress and termination.

The knowledge of the existence, extent, and issue of hepatic diseases, is chiefly to be learnt from a careful and regular observation of the alvine discharges, which again, I express, every medical man should be accustomed to inspect, as it requires time, and close observation, before he becomes sufficiently acquainted with all the varieties, which are evidenced in the appearance of the biliary secretion, and before he can with steady confidence deduce from them, such practical information as will satisfactorily confirm him in his opinion of the

decided truths they invariably convey. This is indeed, a subject which no physiologist has entered into, for, although there be an analysis given of the leading principles of the secretions of the human body by chemical writers, yet no examination has been made of their variations, in the state of health and disease; and of the different proportions which mark the same principles in these separate conditions; truly, it is only by such an examination giving the necessary experience, that a person can be completely sensible of all the changes going on in this secretion, and the productive consequences arising therefrom, which are often singular, numerous, and complicated, acting sometimes on the joints, at other times on the tendons and muscles; frequently affecting the mind, and driving the unhappy sufferer, in particular cases, to madness and suicide; so that in the language of Dr. Saunders, we may say, " it requires the tact of an expe-
" rienced practitioner to discover the real seat of the
" mischief;" at the same time, in by far the greater number of instances, there is no pain or other sensation to direct us to the seat of the actual malady; and in three-fourths of the cases, if there be any pain present, it is on the opposite side, where it fixes its power on the phrenic nerve in that direction.

Where bile is pent up, or a great accumulation of it embedded in the liver and gall-bladder, it produces congestion, and consequently pressure upon the large blood vessels of the abdomen, ob-

structing the equilibrium of circulation; the head sympathizes, and always feels tight and corded, with a sense of stupidity, not unlike the effects that arise from the operation of opium; there is also a dry burning heat of the skin, more particularly affecting the palms of the hands, as in hectic cases.

In conducting the treatment then of this peculiar morbid cause, our remedies must be accommodated in their action to the progress of the disorder; and in investigating the treatment of these complaints, it is necessary to ascertain, not only what medicines are beneficial, but also what changes they produce in the circumstances of the case, and whether the secretions of the liver are either suspended, deficient, or vitiated.

Hepatic or liver disorders in this country admit a division into two stages.

1. That of a simple derangement of the hepatic functions; and

2. An actual change in the organization of this gland.

As the progress of chronic hepatitis is slow, so is it long before any altered structure of the liver be produced, though its functions may be interrupted, and its secretions imperfect, sparing, and of an improper quality; the attendant symptoms in this stage, are affections of the stomach, headach, transient and fugitive pains in different parts, particularly the shoulders and side, and lowness or depression of mind.

In all these cases, the sparing or too dilute secretion occasions a sluggishness of bowels, and an attention to these circumstances, joined with a minute observation of the secretions, will invariably ascertain the true cause of the malady. The treatment here pointed out, is clearly to give full action to the stomach and bowels, by which the functions of the liver will be materially influenced; not overlooking, however, the restoration of that balance, which equally belongs to the surface as to the general circulation; and I cannot, indeed, too much impress the indispensable necessity there is, that our grand aim should be directed to the well emulging of the biliary vessels, and the being completely satisfied as to that essential and important point, and that the peculiar secretion passing by the regular outlet, be free and unembarrassed; this is the more necessary, as we have seen that the resinous part of the bile separating from its natural combination with soda, is apt to glut up several of the small vessels of the organ; so, our measures must be employed in order to effectuate the solubility of this resinous impactment, and thereby relieve it from such concretions, which by its mechanical excitement renders the constitution tremblingly alive and distressed by the slightest causes.

Wherever obstructions of the liver exist, it is certain that the first digestion must go on very imperfectly, therefore the first indication in this case is, to clear the bowels of phlegm, and other causes

of irritation; the second, to remove the obstructions of this viscus, to restore the lost tone of the intestines, and to strengthen the system in general.

From the experience of practitioners in tropical climates, mercury has long been acknowledged, as the decided specific in all hepatic affections; but, however proper it may be, in the state of hepatitis in these climates, the same mode of treatment is not to be pursued here. The cure by mercury requires much judgment, nicety, and discrimination, to know the exact length to which it should be carried, for the purpose of acting upon the disease, without its being pushed so far as to have an influence on the constitution, injurious to the general health; mercury, indeed, stimulates the whole secreting system more, and more equably than any other known remedy: it should, therefore, be employed no further than to excite what may be termed a necessary action, to rouse and give energy to the absorbents, but not to debilitate, weaken, or exhaust, by an overpowerful impression; for although this mineral in local affections of the liver is a medicine of acknowledged efficacy when seasonably administered, yet there are cases, and not a few, where its use would be highly exceptionable and improper, and it is this discrimination in which the hand of experience is displayed; for whenever alternations of increased and diminished flows of bile take place, the proverb, "festina lente," should ever be held in remembrance by the

practitioner, as highly applicable in the treatment of hepatic complaints, where mercury is prescribed.

The amazing doses of calomel borne in warm climates, are no criterion here; and the habits of this country, though the mercurial principle may be just, require milder methods of proceeding; mercury is to be used only in a gentle and discreet manner, and is seldom necessary for any length of time, in the first stage of the disease; for it is a well-known law in pathology, that if the excitement of a gland be carried beyond a certain point, its secerning function can no longer be performed; in these circumstances, if a stimulus be applied to it, it often increases the vascular excitement upon which its suspension depends, instead of restoring the regular secretion, which is wanted.

As we have seen, that a tough glairy mucus often lines the coats of the intestines, in hepatic cases, retarding the flow, even of the small quantity of bile that is secreted, so the first step is, a careful removal of such tenacious and vitiated matter, which keeps up morbid irritation, by a well arranged and regular exhibition of deobstruents. During their use, the secretions should be judiciously noticed, in order to discern when this point is attained, and when the secretions display the true character and natural bilious appearance; as soon as the latter is accomplished, the passage of the bile is ensured; the preserving this, and promoting its increased quantity, by continuing to act on the functions

of the liver, and augmenting its energy and circulation are the next objects; not however overlooking the extremely distressed and morbid condition of the innumerable glands of the intestines. This is to be effected by accompanying with our deobstruents, at this period, such auxiliary remedies of the tonic and invigorating class, as are calculated to produce the desired benefit, without at the same time lessening the power of the deobstruents. On the subject of deobstruents we may here remark, that saline cathartics, which are gentle and quick in their operation, and therefore favorite remedies with invalids, are often too restrained in their power, being only capable of unloading the intestines, without possessing that extended and necessary principle adequate to unfettering the choaked up biliary vessels, and to an effective emulgment of the liver, which are highly essential to protect and relieve from any noxious annoyance the extensive range of glands which in every point beset both the small and large intestines; a consideration of the first importance in the treatment, and which ought never to be disregarded.

While we thus act on the organ and its secretions, the state of the stomach is not to be neglected; the secretions here are equally faulty as in the bowels; they consist, as we formerly stated, of a vitiated gastric matter resembling bile, but in fact possessing no portion of this fluid. It is this circumstance which misleads practitioners, and

makes them suppose that there is rather an excess than deficiency of bile, when they observe the matter brought up by the efforts of vomiting; the stomach, therefore, as well as the bowels ought to be corrected of its similarly offending contents, which, from their irritation on the organ, generally continue the appetite unimpaired. It is only then, by these indications strictly laid down, and persevered in, that the cure of hepatic complaints can be accomplished; for indeed the bowels may be apparently emptied, and a profuse discharge pass, such as will satisfy a patient that they are sufficiently open; and yet there may be a positive confinement of part of their contents, as well as at the same time a considerable obstruction in the transmission of the bile. Hence, we should by no means rest satisfied, until our endeavours have fully succeeded in emulging the liver. It is like the Augean stable, which demands equal zeal on the part of the patient, as on that of the practitioner, until this point is decidedly gained.

In the course of treatment, I have often observed, that some heat, tenderness, and even pain have arisen about the region of the liver (though there had been previously no sensations of the kind) and this I have generally remarked as a favourable omen, as it eminently demonstrates that the organ is making an effort towards recovering its lost powers, and, as it were, emulging its different vessels of their impure, accumulated, and acrid contents.

We may observe, that in those cases where considerable morbid enlargements of the liver, spleen, mesenteric glands, and other connecting viscera have prevailed, that much advantage has been derived from a belt worn round the body, which by its suspending and sustaining influence, has sensibly alleviated the incumbent disease.

The medicines employed should be assisted by diet and regimen. In the choice of diet, the proportion of vegetable food of the mild farinaceous and amylaceous kind, should here exceed, but leguminous vegetables, and those of a cold and crude nature, which are apt to ferment and create flatulence or distension, should be studiously avoided: in some instances, however, such is the strong and immediate tendency to active fermentation in the stomach and bowels, that vegetables for a time require to be strictly prohibited. The animal food should consist principally of mutton, beef, or game, so roasted or boiled as to retain its arterial and nutricious juices; veal, pork, and the white meats in general, as also fish, are objectionable; all food a second time dressed, by hashing, mincing, &c. being less digestible, should generally be interdicted; likewise all oily matters, as they will turn rancid on the stomach, and produce a greater acridity of the gastric juice; this will necessarily exclude melted butter, every thing fried, every species of pastry, together with cold, raw, or unboiled vegetables; ripe fruits may be admitted in moderate quantities, rather before

than after dinner. It may, however, be observed here, and from attentive experience I am persuaded that the stomach digests solid aliment more easily than liquid and bulky food, and that soups and broths are more quickly disposed to run into active fermentation, and require the exertion of a more vigorous principle to restrain the often corrupt and spontaneous changes, than animal food in a solid form. At the same time, on this subject, we may with propriety introduce the maxim of Hippocrates, whose great judgment and observation will be admired in the same proportion as his writings are understood, a maxim which cannot be too strongly inculcated, "That diet must be proportioned to labour," and when the varied exercise and occupations of different persons are considered, it is matter of surprise that this precept should have been so little regarded.

As to diet, it is not so much in the quality as in the quantity in which man generally errs; "for I "can easily believe," says a great physiologist, "that a much smaller quantity of food will afford "sufficient proportion of nourishment, if the mas- "tication be particularly attended to, than when "it is neglected, as there is no force applied to "the aliment in the stomach or intestines, that can "be at all considered equivalent to adequate masti- "cation." By the food being well broken down with the teeth, and eaten leisurely, (the necessity of which I cannot too often or too strongly inculcate) the secretion of saliva will be increased and

mixed with it, which passing into the stomach will promote digestion, and augment the powers of the organ; for the union of the gastric and salivary fluids is certainly intended to operate by a chemical agency on the food, in the preparation and separation of chyle.

The foregoing observations are often too much disregarded by patients, yet, if they reflect for a moment, they will clearly perceive their propriety; and this cannot be better demonstrated and illustrated than by the following conclusive experiments of the celebrated Spallanzani, who observes, that the necessity of mastication should be strictly enforced. "There is perhaps no person," says he, "who has not some time or other been subject to "indigestion, for want of having duly chewed his "food. I took two pieces from a pigeon's heart, "each weighing forty-five grains, and having "chewed one as much as I used to chew my food, "inclosed them in two spheres, and swallowed "them at the same time; both these tubes hap-"pened to be voided at the same instant, and I "then saw how much digestion is promoted by "mastication; of the masticated flesh there re-"mained only four grains, whereas of the other "there were eighteen grains left. This was con-"firmed by two other experiments, one made of "mutton, the other with veal. The reason of this "is obvious, not to mention the saliva which "moistens and attenuates the food, it cannot be "doubted, that when it is reduced to pieces by the

"action of the teeth, the gastric juice meets it at "all points, and therefore the more speedily dis- "solves it, just as other menstrua dissolve soonest "those bodies that have been previously broken "into fragments."

The meals, particularly dinner, should be made at an early hour, during which about a pint of spring or toast-water should be the beverage. All fermented liquors ought to be abstained from, and although a small quantity of wine may be indulged in, yet it should never be carried to that extent as to produce heat, or cause the fever of digestion to be sensibly felt; truly we may say, that the good effects of tempérance, though acknowledged by all, it is to be regretted, are duly regarded by few.

The supper should be as light as possible, indeed altogether avoided, if it be the practice with the individual of deferring full meals to a late hour of the day, as is the present unhealthy fashion.

It is a well-known circumstance, that invalids are often subject to a false appetite, or a sort of craving, which does not arise from the demands of health, but from a morbid condition of the gastric glands, which prompts them to eat more, and more frequently than nature requires. By taking into the stomach various kinds of aliment, or improper food, which this false appetite induces, imposes too much on the organ, and even over-powers the soluble properties of the gastric juice, in consequence of which, the materials of nutri-

ment are conveyed into the duodenum or preparatory receptacle for their entrance into the system, in a crude, acrid, and unprepared condition; thus, the digestive and absorbent arrangements are overwhelmed, and difficulties are thereby created, which often repeated must necessarily more and more exhaust and embarrass these assimilating faculties, and render the chyle thus obtained a defective and impure production, not sufficiently elaborated by the power of the organs; for it is an incontrovertible truth, that too much overtasks nature, and turns more into disease than nourishment; indeed, every inordinate appetite defeats its own purpose, by overshooting the mark at which it aims.

The old adage of the temperate should be constantly kept in mind, "Rise with an appetite," or at least cease from eating before the sensations of satiety begin to arise; further, it may be observed, that plain food plainly dressed is always best suited for nutrition: if food be well digested, and taken in proper quantity, the most simple will be found abundantly adequate; moreover, high seasoned dishes are by no means the most sustaining kinds of food; they leave that impression upon the palate and stomach, which invariably exhausts rather than fortifies. The same might be said of all improper stimulants, which by long continuance, counteract their own purpose, and produce atonic effects, by unduly rousing the several faculties, as it were, to turn round the wheels of life too rapidly, whereby the body is worn out before its time; the several

instances of longevity are chiefly to be found among those who live on spare and simple diet. Digestion, we may remark also, is best promoted by a state of rest after meals.

To preserve the body, therefore, in the proper exercise of its functions, all those who eat plentifully, or to the extent of their appetite, should daily have two motions; and the great Mr. Locke, in his Treatise on Education, points out the necessity of this to health, advising every one to solicit the call of nature night and morning, until it becomes a constant habit; by which means the inconvenience of constipation, and all its mischievous consequences, will be warded off; for the evacuations of the body, from its superfluous, insoluble, and noxious particles, are no less necessary than its nourishment; hence that adage, "Corpora non "æquent nisi sint soluta," and thus, by a continual accession of new matter, and the discharge of what was become useless, that renovation and purity of the blood is preserved, so necessary to its well being.

Exercise, properly regulated, will, in all cases, very essentially contribute to invigorate and strengthen the action of the liver, but it must be adapted in its degree and the time of using it to the circumstances of the individual; riding on horseback was Sydenham's favourite exercise, by which he promised to cure every thing but the most confirmed consumptions.

The hepatic vessels, undisturbed by disease, are of so torpid a nature, that both respiration

and the action of the abdominal muscles are essential to their duly carrying on their circulation, as well as for the passage of the bile through the inert and passive gall ducts; such being the case, it decidedly proves the indispensable necessity there is for muscular movement, the more particularly when this torpor is morbidly augmented; and although exercise ought to be regularly used, yet it should not be extended to a fatiguing degree: hence, riding on horseback, which agitates the muscles and internal viscera of the trunk of the body, is well suited to the early stage of chronic hepatitis, but after the liver has acquired an enlarged size, it is apt to be too severe; when used, the time chosen should be between meals, and when the stomach is not oppressed with food. But the objection which applies to riding on horseback as being too violent in some instances of the disease, does not so generally apply to another species of exercise at present very little employed, though sanctioned by remote antiquity, I mean frictions, either with flannel, or a suitable brush; (yet even this friction, in those cases where a sensible degree of inflammatory excitement prevails, either over the membrane of the organ itself, or of that covering the abdomen, is inadmissible, until such increased action is subdued) which, besides exciting and preserving a comfortable warmth in the interior of the body, proves excellent auxiliaries in promoting and restoring a vigorous circulation, secretion and absorption: the ancients have said so much in favour

of this remedy, and the practice prevailed so long, that we may reasonably suppose very salutary effects were produced by it. "In those bodies," says Boerhaave, "where any of the viscera destined to form the chyle, discharge their office imperfectly through a state of inactivity, rubbing the abdomen with woollen cloths, in a morning fasting, has wrought wonderful effects."

Galen recommends to old men the use of friction with oil in a morning after sleep, and directs them to continue their accustomed labours, but with less vehemence.

In treating of exercise, it may not be improper to mention the evil consequences which result from sitting constantly in a half double position of the body; by this position the abdominal viscera almost sustain their whole weight, and being thereby unduly compressed, the circulation of the blood through these vessels becomes obstructed, and the several secretions and excretions necessary to life impeded or suppressed. A striking instance of this was evidenced in the well known case of the late Sir Joshua Reynolds, whose liver was found enormously enlarged; in consequence of this continued inflected posture of the body. Indeed we may remark, that any exercise is advisable which will necessarily oblige the patient frequently to bend his body in various directions, or otherwise agitate the general frame, whereby a free circulation is induced through the abdominal viscera; this must always be attended with beneficial re-

sults in this disease, except in those cases where there prevails high inflammatory excitement.

I cannot forbear impressing, that the utmost attention to the warmth and dryness of the feet is indispensable, a consideration of importance, but which is too often neglected; indeed, the clothing generally should be of the warm description, in order to defend the body from those sudden atmospherical transitions, which are so frequently experienced in this uncertain climate, and to maintain an equal temperature of the system, so that an equable and undisturbed transmission of circulation may be extended to every part.

With the dietetic and other points of attention, it would be improper to omit some observations on the use of the warm bath, as an assisting agent in removing obstruction: this it does in promoting and preserving a due balance between the absorbent and exhalent apparatus; and as this is often lost in an eminent degree in visceral affections, so the warm bath offers a useful auxiliary (especially in those cases where the glandular system has been greatly defective in function for a length of time) to the other measures we have already detailed; it not only acts on the external surface in rendering the circulation free and unembarrassed, but it affords a grateful, mild and uniform stimulus to the whole body; it also refreshes the mind and diffuses over the general system a sensation of ease and pleasantness; it particularly upholds that wonderful economy and harmony in our interior organs, on

the disposition of which, the healthful comfort of existence so much depends; but in the application of the warm bath as a coadjutant source of relief in hepatic disorders, it is right to notice that it cannot be employed with advantage or security, until some of the portentous obstructions are previously removed; therefore on its timely and judicious management, the practitioner only must decide.

By assiduously following these arrangements, the first stage of chronic hepatitis may generally be remedied, and the nicety lies more in finding out the true cause of the disorder, than in the actual treatment at this period, which can only be done, we cannot too often repeat, but by a careful inspection of the excretions; for the symptoms, whether of stomach, bowels, head, or chest, are all equivocal, and may arise from a different cause than mere hepatic sympathy; hence, the latter can only be ascertained by a careful examination of the part or organ, which tells more in the advanced, than in the first stage of the disorder, or from observation of the alvine contents, which is at all times the truest evidence; and thus we are again reduced, as our certain criterion of information, to that observance of the secretions so often recommended; the importance of which has never before been extensively surveyed, or accurately investigated.

II. ALTERED ORGANIZATION OF THE LIVER.

From the first stage, then, we come to the more advanced progress of the disease, where the struc-

ture of the liver has already undergone an alteration in its healthy texture, by an enlargement of its substance, and an obliteration or occlusion of its small vessels, the consequence of long continued inflammation. This takes place in various degrees, and to various extent; the morbid disposition also extends, from simple thickening, to the ultimate stage of schirrhosity: it is amazing, under the influence of that irritation, to which the liver is subjected in the course of disease, to what a size it will often attain, and what a quantity of solid matter will occasionally be added to its substance. Surprising instances of this are to be found in the writings of medical authors; and that these morbid changes may be properly understood, we shall refer to Dr. Baillie's excellent work on morbid anatomy, where they are traced with much accuracy, and minute anatomical investigation, under all their complicated varieties and appearances. And it may here be noticed, that the affections of the liver observed after death, as invariably remarked and admitted by all anatomists, are much more numerous than those of any other secreting gland of the system; for not only is there perceived enlargement, induration, or a coriaceous and scirrhous state of the organ, but also a softness of its texture, and even an excessive diminution of its bulk. Tubercles are also formed in it, and vesicular cysts, denominated hydatids; adhesions likewise occasionally arise betwixt it and the contiguous parts; thus, disease produces in its structure changes as numerous as they are difficult of explanation.

From this consideration of the ultimate stage of hepatic disease, as depending on the altered texture of the organ, it is clear that the most active, and energetic means are requisite to check the progress of such an alarming evil, as the constitution now is encircled with such a labyrinth of difficulties, that the absorbent and secreting faculties are disabled in the extreme. Mercury, though partly objected to in the former stage, cannot be dispensed with here; it must therefore be introduced into the system in the best and mildest form, that can be devised consistent with the circumstances of the case, keeping always in view, that its deobstruent action should be excited in a sufficient degree, to completely emulge the organ, as on this its principal and beneficial effects entirely depend. Whether mercury ameliorates and augments the secretions of the other organs as it does that of the liver, remains a point yet to be ascertained. Mercury, indeed, when administered on the principle above suggested, suited to the state of the disease, acts as a gentle spur upon the vascular system of the liver, and by its moderately stimulating influence, occasions at length that necessary restoration of action, by which the bile is properly elaborated, and health gradually restored.

In conjunction with this medicine are to be administered the powers of other adjuvant deobstruents, most adapted of making a decided and favourable impression on the organ; and by assisting the general remedies by local means, much advantage will be produced; among the local

means, I may here intimate (in those instances where the liver has been exceedingly enlarged) the decided benefit which has been derived from the application of the following plaister spread largely over the diseased surface, so as to act both medically, and also on the principle of a bandage in giving support.

℞ Emplastrum ammoniaci (Pharmacopœiæ Londinensis)—confectum cum aceto scillæ in loco acidi acetici.

It is not to be concealed, however, that there is an ultimate stage, in which we cannot expect success, a strong reason for an early attention to the symptoms, which indicate the existence of such a disease; in this case, the impeded circulation of the organ, producing pressure on the venous system, occasions the appearance of dropsy, and when this consequence of scirrhous liver shews itself, little is to be expected: This state, however, seldom occurs, until a late period of life, as already noticed on that subject, and where it occurs early, success will often attend our endeavours; indeed we may hold forth reasonable hopes of a happy issue, even in this stage of the malady, provided the treatment is pursued steadily, with unremitting attention for a due length of time; therefore in no case should inaction and despair ever pervade the mind of the practitioner: unexpected changes often occur in diseases; and it is difficult, not to say impossible, to circumscribe the powers of the constitution when assisted by the hand of experience.

From this detailed and practical view of the treatment of hepatic complaints, in nine-tenths of the cases that occur, their removal is within the reach of such an active and attentive management as we have here enjoined; and if the directions of the practitioner are strictly adhered to, and duly persevered in, we may with some confidence assert, that the result will be much oftener successful under very unfavourable circumstances, than could have been expected or *looked for*.

CONCLUDING OBSERVATIONS.

Many who peruse the present work may feel disappointed, that the Author has not entered more largely into Theory; but those who know the fallacy of all speculation in medicine, will give him credit for making it entirely a Practical Treatise. The statements recorded are all drawn from practical facts; an attentive and unwearied investigation for several years on the various changes in the different secretions, has enabled him to furnish the preceding remarks on the subject, and by forming his indication, entirely from their state and appearance in the manner he has pointed out, he has been enabled to remove the complaints for which he has been applied to, and their removal has been always attended with a healthy return of the biliary discharge, which he invariably found the sure test of renovated health.

In concluding the present work, the Author

must apologize to his readers for the tautology that appears in some parts of it. This arises from his conviction of the importance of the subjects, and of the necessity of pressing, by repetition, certain leading points on the attention of his readers, whether professional or otherwise. It is his wish, that every one should view the attack of bilious diseases in the same formidable light that he does; they would then make use of every early effort in their power to remove them, and by such timely and efficient attention, prevent the many serious and permanent consequences, which too often are entailed on the constitution from procrastination: for, it may be remarked, that the human body, both in its natural and diseased state, undergoes such frequent changes, as to render a remedy that proves beneficial at one time, prejudicial at another; hence the propriety of employing, on every occasion, such apposite means, as may preclude the evils of relapse.

It may strike some readers, that in the foregoing work, the Author has occasionally been betrayed into something of an egotistic and dictatorial style: for this he flatters himself his readers will shew a due indulgence, when they reflect how deeply and ardently he feels interested in the detail of what has so repeatedly passed under his immediate observation, and the success which has been consequent on a proper application of the principles herein promulgated.

In the treatment, he has only entered into general

principles. This is sufficient for the profession, and for the public it is unnecessary to enter into medical minutiæ, which they could not of themselves carry into effect. The utility of it to the public is to point out the frequency of hepatic disorders, the dangers of their continuance and neglect, and the importance of early caution to correct the habit, and prevent the accumulation of the secretion of the liver to excess, as well as its excessive diminution, both equally productive causes of disease. Though many volumes have been written on the subject, there is no author who has impressed the indispensable necessity of vigilant attention to the state of the secretions, as a leading criterion to direct our conduct in this class of maladies, and demonstrated the little regard which is to be paid to the state of the bowels alone, without this circumstance: it is a maxim drawn from long and tried experience, and from a constant practice in the treatment of these diseases, presented to the author in all their forms and varieties in this and other climates.

And he may here say, that the ultimate perfection of all medical science, centers at last in the cure of diseases; and that is the most useful part of it, which enables us to accomplish this desirable termination.

CASES.

THE following cases, selected from a great number which have fallen under my care, are here inserted, to illustrate the principles and the practice detailed in the preceding pages, and to shew the success which has attended their proper application.

CASE.

HYDROCEPHALUS INTERNUS.

TOWARDS the end of last year, I was consulted respecting the case of a delicate young lady, nearly four years of age, who had for some days previous to my visit, been attacked with fever, and for the preceding twenty hours had been lying in a state of stupefaction, apparently resembling one asleep. On minute examination of the appearances, I was fully satisfied it was a case of real hydrocephalus. It was with difficulty I could rouse her for a moment, when her eyes were immediately again closed; the pupils on inspection appeared much dilated, and occasionally turned upwards; there was also a disposition to strabismus, or squinting; at this time it was mentioned to me by the parent, that the constant drowsiness, already noticed, had been much greater for the last eight hours; the bowels were extremely confined, the pulse much accelerated, with some degree of fulness. Forming my conclusions on the nature of this disease, as arising from a primary affection of the liver, I immediately began, conformably to the plan of cure, to excite the action of this organ. Blood was drawn from its region by cupping, and enemas thrown

up the bowels, joined with strong cathartics; next day produced no change on the symptoms of the patient; on the contrary, the torpor and drowsiness seemed increased, for she lay in a total senseless or comatose state; the strabismus or squinting was now completely formed; the bowels still continued obstinately constipated, in spite of the exhibition of the cathartics, which produced only a trifling discharge, probably brought on by the clysters; finding my patient continued in this alarming state, I had recourse to the most active means; the cupping was repeated to the extent of several ounces, succeeded by the application of a blister on the hypochondriac region; the head was kept well raised, and a cool regimen enjoined: the following medicines were likewise administered:

℞ Pulv: Scam. Comp: gr. ij.
Hydrar: Submur: gr. i. ft. Pulv: secund: quaq: hora sumend.

℞ Potass: Tart: ʒiij.
Mann: Opt: ʒvi.
Resin: Jalap: gr. xij.
Infus: Sennæ: ℥iv ss.
Tinct: Aloes ʒiij. m: ft: mist: sum:
Coch: ij. mag: sing: hor: post: Pulv:

In addition to the above, enemas were continued.

On the fifth day from my commencement, I had the pleasing satisfaction to observe the bowels disposed to resume their natural action; the motions became more copious; my plan was still continued and directed to the affection of the liver. In the progress the symptoms varied, and were alternately better and worse, and often accompanied by an uncommon degree of torpor. It was not until the eighth day, that the action of the liver seemed recovered from its lethargic condition, and the suspended operation of its functions, which hitherto prevailed. This was apparent by the motions, which now assumed their proper and healthy state, having the true saffronous bilious tinge. This appearance confirmed me in the happy presage I had formed, in which I was not disappointed; the stupor and drowsiness gradually abated; but still afraid of a relapse, and that the biliary secretions might

be again defective, I paid the strictest attention to its progressive operations, by which, the return of health and complete recovery was ensured in eighteen days from the period of my first visit. Such cases of hydrocephalus, proceeding primarily from hepatic obstruction, require all the energies of the practitioner to be employed, and no direct or clear opinion can be pronounced, as to the recovery, until the object of well emulging this organ is decidedly effected; as the heaviness, and the other symptoms of the head, in these cases, are only a consequence of a suffering, impervious, and over distended liver.

CASES.

ACUTE HEPATITIS.

Miss M———, in the neighbourhood of Fitzroy Square, aged 22, of a delicate and spare constitution, was attacked with acute hepatitis. The earliest symptom she experienced, was that of feeling so extremely heavy and disposed to sleep, that it was with great difficulty she could at all keep herself awake: this arose about fourteen hours previous to the attack of pain, which she then began to feel in a very sensible degree in the right hypochondrium, shooting to the back and shoulders, accompanied with considerable general heat, full and quick pulse, much thirst, great restlessness and uneasiness; the liver when pressed on with the fingers, was so exquisitely painful, as to occasion her to experience great distress; the bowels had been in a state of confinement some time; she felt some oppression of the chest, but without cough; bleeding was instantly employed, to the amount of ten ounces, with active cathartics; on finding, at the distance of eight hours, the inflammation was extending over the membrane of the abdomen, with an increase of pain, the bleeding was repeated; cupping over the part was likewise performed; observing the bowels were not acted upon in any way satisfactorily, I ordered clysters to be thrown up every six hours, at the same time following up nearly such an arrangement as is recommended in the treatment of

this disease. She went through a most restless and painful night, and in the morning the symptoms of spreading inflammation had much increased, with a general tenderness over the chief part of the peritoneum, the pulse felt tight, full, and much accelerated, the tongue foul, with great thirst; bowels had acted but sparingly. She was bled a third time nearly to fainting; cupping was again had recourse to, subsequent to which, a large blister was applied over the right side; towards evening the pain was in a great degree arrested, inflammation was reduced, and a general relief was the happy result. The bowels had now fortunately been emptying themselves more freely, the discharges were highly fetid, and appeared like fæces long confined; from this period the symptoms gradually yielded, she passed a much better night, with occasional slumbers, and in the morning I observed she had discharged several black liquid motions, which continued of that nature through the day. Every thing now assumed the most favorable disposition, and by keeping up the principle advised under the head of treatment for acute hepatitis, my patient daily amended, and her recovery was completely effected in three weeks.

Mr. Y——, of Bernard Street, aged 49, of tall stature, and delicate make, who had returned to this country six months from Barbadoes, where he had resided some years. He had not enjoyed good health for a considerable time, was in the habit of taking freely of wine, and of late his legs swelled towards evening. In the month of June, I was requested to visit him, and found his disease to be an acute affection of the liver, much pungent pain over the organ, cough, with short and laboured respiration, extremely thirsty, with furred tongue, a diffused dry heat pervaded the whole body, the pulse was hard, full, and frequent, could not lie but on the right side, great dejection of spirits, and considerable restlessness; he had been labouring under these symptoms nearly twenty hours previous to my having seen him; in the last four hours they had increased with considerable violence. About eight ounces of blood were immediately drawn from the arm; and shortly after, cupping over the side to the amount of nine ounces; he was likewise ordered the following:—

℞ Hyd: Submuriat: gr. xii.
Ext: Colocynth: Comp: gr. xxv.
Sap: Castill: gr. x. Ft: Pil: ix.
Sumt: iij. quaque hora.

℞ Infus: Sennæ, ℥iv.
Potassæ Tart: ʒv.
Mannæ Opt: ℥ss.
Tinct: Jalap:
—— Aloes, āā ʒiss. M: ft: mist:
Capt: Coch: iv. mag: cum sing: dos: Pil:

The medicines operated, and brought from the bowels a considerable quantity of fetid water, but no solid matter, nor were there scarcely any fæces mixed with the discharges; the breath was relieved, but the pain of the side had increased, and the inflammation extended over a large surface of the peritoneum; the pulse was more frequent, and somewhat irregular. Fearing from the mode of his general living, and his present state of constitution, I hesitated about bleeding again from the arm, thinking I might impoverish too much his debilitated powers; therefore, as he objected to cupping again, 15 leeches were applied over the side and abdomen, and a cathartic enema injected, a short time after which a profuse operation from the bowels came on, bringing off an immense quantity of feculent matter, most highly offensive in smell, after which, he experienced almost instant relief; he was then ordered the following:

℞ Mist: Amygd: ℥iss.
Magnes: Sulph: ʒiss.
Mann: Opt: ʒi.
Pulv: Ipecac: gr. ss. Ft. haust.
Quarta quaque hora sumendus.

The bowels continued to discharge, and in proportion as they emptied themselves, the inflammatory symptoms diminished. By confining him to his bed, on a low vegetable diet, with acidulate drinks, making such alterations in the medicines, and on other points proportioned to the improving condition of his strength, he by degrees got better, and at the end of 14 days his health appeared restored; but considering

this indisposition as arising from an imperfect secretion of bile, he was advised to continue on some deobstruent plan for a month, with a suitable diet, when his health was entirely re-established.

Mr. F———, of Marchmont Street, of a plethoric temperament, aged 29, was attacked with acute hepatitis; it commenced with shiverings, nausea, followed by a considerable vomiting of vitiated gastric fluid, tightness of the chest, with some oppression of respiration and cough, head-ache, great thirst, considerable diffused heat over the whole body, pulse hard, full, and much accelerated, attended with great restlessness and acute pain of the right side, running towards the shoulder blades, the gentlest pressure over the liver gave him much uneasiness, even exquisite pain, and excited considerable and repeated cough; these symptoms began to affect him in the night, and were amazingly increased by the morning, when I first visited him; I instantly bled him from a large orifice in the arm, to the extent of 14 ounces, and ordered some active cathartic medicines. In the evening of the same day, the inflammatory symptoms were materially increased, the bowels had been operated on but sparingly. Bleeding was again employed, and as the pain of the side had increased, and was spreading over the peritoneum, cupping over the part to the quantity of 8 ounces was likewise had recourse to, with cooling deobstruent medicines, &c.; he was very restless through the night, with occasional delirium, and in the morning I found the symptoms were considerably augmented, with a general extending inflammation over the whole membrane of the abdomen. Fourteen ounces more of blood were taken from the arm, and he was again cupped; carthartic enemas were also thrown up.

Indeed this case was stubborn, and accompanied with such high inflammatory action, as did not yield until after seven bleedings from the arm, four cuppings over the side and abdomen, and the application of twelve leeches; the bowels were very torpid, and it was not until the third day, that they operated at all efficiently; at this period my patient's dangerous and alarming state was by degrees ameliorated, and by strict care and nice attention (such as I have previously advised) for a week, the symptoms of inflammation were wholly overcome, and his health restored in rather more than three weeks.

CASE.

ACCUMULATION OF DISEASED MUCUS.

Mr. K——, of Hunter-street, aged 58, corpulent and plethoric in his habit, had for several years been occasionally subject to pain and tightness of the chest: on going up stairs, or any ascent, the breathing became immediately affected, and he was compelled to pause from stair to stair, in order to recover his breathing; his pulse had been marked to have occasional interruptions during the last three years, the intermissions of which were sometimes really alarming, from the long pauses made in the circulation. Some months since, being requested to see him, I found on inquiry he had passed considerable quantities from the bowels of extremely heavy viscid mucus, of a yellowish colour, and some hours previous to my visit at this time, had discharged several motions of this kind. I ordered him in this state immediately to bed, and for three days he took small doses of the sub-carbonate of potash locked up in the almond mixture every four hours, with a thin diet, chiefly of gruel. For four days he continued to discharge, several times in the course of each day, large quantities of mucus, unmixed with any other matter, to the extent altogether, I am firmly convinced, of from eight to twelve pounds; his diet was carefully regarded, until the bowels had acquired some apparent strength and marks of recovery. The removal of this astonishing load of mucus, seems to have acted on the patient like a charm; the pain of the chest was wholly removed; he could ascend the stairs with comfort and ease. His case had been considered by several medical gentlemen whom he had consulted, as dropsy of the chest, by some an accumulation of fat about the heart, and by others as ossification of the vessels. This case tends clearly to shew what serious symptoms may be produced, solely by immense collections of mucus, acting either from its weight or vitiated and diseased condition. I could enumerate several other instances, where the accumulations of such mucus occasioned symptoms of the highest importance and concern, all produced from a defective secretion of bile, and a corresponding torpor of the intestines.

MISTAKEN PECTORAL CASES.

An officer of rank in the army, recently arrived from the West Indies, and who resided at the New Hummums, Covent Garden, became my patient in February 1814. He had, while in the West Indies, been subject to an affection of the liver. His present symptoms were a troublesome cough, attended with fever and oppression of the chest, his skin hot and dry, expectorated much yellow matter resembling pus, which created in him great uneasiness and alarm, fearing that it might arise from ulceration of the lungs. I assured him, however, that this expectoration was nothing more than vitiated mucus, and that the whole train of his symptoms were connected with a disordered condition of the liver, and not any diseased state of the lungs; that the liver was truly the primary seat of the complaint, and the remote thoracic distress only symptomatic; indeed, whatever circumscribes or diminishes the cavity of the chest, necessarily precludes the free expansion of the lungs, and thereby produces the same effects on the respiration, and the enlargement of the liver (at its superior portion) accordingly having this influence, occasioned him this alarm, apprehending his complaint to be decidedly of the pulmonic character. My opinion, however, was verified by the issue of the complaint, from which he entirely recovered in less than a month.

B——, Esquire, of South Audley-street, of a delicate constitution, about 20 years of age, had been residing some time in the country, where he had bathed several times. On his return to town, I was called to attend him, when I found him labouring under considerable influence of fever, violent pain of the head, with a thick coated tongue, and the halitus from the lungs breathing very hot, was extremely thirsty, face flushed, and a general increase of heat pervaded the body, pulse hard and particularly accelerated: he had been poorly some few days, feeling alternate chills and heats. He was confined to his bed; and by febrifuge, and deobstruent medicines, in about a fortnight he became convalescent, which induced him to take an airing in the carriage; he remained out some time, during which he felt the air chill him considerably; and in the space of 24 hours from this period, a

fresh accession of fever took place, accompanied with considerable tightness and oppression of the chest, attended with cough, pulse full and frequent; bowels betrayed an evident fault in the biliary secretion. In about ten days, the fever assumed an intermittent or aguish character, of the tertian form, the cough still continuing, and in a short time, this was succeeded by an expectoration apparently purulent. A highly distinguished and respectable physician was at this time in attendance with me, who after a few visits, decidedly pronounced the disease as marked consumption, pointing out to me his positive belief that tubercles had formed in the lungs; and in order to give his opinion greater weight, he particularly referred me to some valuable observations of the late Dr. Heberden, recorded in the Medical Transactions, on the formation of matter, and the errors sometimes committed in viewing the fever as of the intermittent stamp, instead of seeing it in its full and true hectic bearing. The cough and spitting continued, as did the intermittent; his opinion remained the same; indeed, the conclusion drawn by him was, that the patient could not outlive two or three months; in this decision, however, I entirely differed from him, and this I stated to the friends of the patient, observing, that I considered the chills or rigours, as marking a diseased condition of the liver, and not of the lungs. The event invincibly proved my prediction to have been correct, as, in the course of a few months, he recovered.

Miss G——, aged 11 years, daughter of a merchant in the city, was sent to Kensington for country air, at the express desire of her medical attendants, who pronounced her to be in a deep decline, or last stage of pulmonary consumption. She was at this time placed under my care; I found her with a teazing and almost incessant cough, attended by an immense quantity of expectoration of thick mucus, resembling pus, with a dry hectic heat over the whole body, great thirst, much emaciation, and considerable debility, to that degree she could scarcely stand; the pulse beat 120 in the minute. On minutely examining this case, I was soon fully satisfied that her alarming train of symptoms did not arise from an organic affection or ulcerated state of the lungs, but from a considerable obstruction or altered structure of the liver; indeed, this was the case to an extensive degree, as an enlargement of this organ was distinctly perceptible at its lower lobe. Hence,

this expectoration consisted not of real pus, but of vitiated mucus depending on the fixed irritation kept up in the pulmonary organs; for as the lungs are composed of innumerable air cells, which communicate with the wind-pipe, and from thence are inflated with air every time we inspire; whatever, therefore, obtrudes upon the area of these cells, must necessarily be productive and keep up a constant inordinate action and morbid excitability in these parts, causes amply adequate to induce such depraved and increased secretion. My opinion was justified by the event; the arrangement of her case commenced early in July, and by the end of August her health was re-established.

Miss N——, about 13 years of age, born at Jamaica, had arrived in this country four months. At the time I was consulted she was under the care of two physicians, both men of importance, who gave it as their opinion, that her disease was pulmonary consumption, and that ulceration had positively taken place in the substance of the lungs. On my first visit, I found her labouring under a severe hollow cough coming on in violent fits, but not quite so severe as it had been; the pulse was small and exceedingly accelerated; the tongue was little affected; her expectorations consisted of large quantities of viscid mucus resembling pus, but was really nothing else but mucus secreted from an irritating cause, and exhibiting a vitiated appearance. After examining the side and body, in a very careful manner, and seeing her again, at which time I had an opportunity of viewing the secretions, I pronounced the disease to be evidently an affection of the liver, and that the lungs were suffering from the cavity of the chest being contracted, from which confinement they were incapable of performing their aërial functions but with difficulty and distress; shortly after this, the expectoration ceased, and her health progressively improved to her full recovery.

A gentleman residing in the city, 40 years of age, who had six months, previous to my seeing him, laboured under a cough and difficulty of breathing, referred by those physicians who had hitherto attended him, to a diseased state of the lungs. On his application to me, the leading symptoms were

much emaciation, impeded respiration, with a teazing cough, to that degree, that he could not lie in bed without having his chest raised, great dejection of mind and prostration of strength, with a slight pain at the pit of the stomach; his pulse at this time was 120, with a hot and dry skin, appetite not much impaired, felt full and uneasy after dinner, the tongue apparently in a natural state. On examining his body, I discovered some fulness in the right hypochondriac region, and on pressing my finger in the situation of the liver, it produced sensible pain and uneasiness, causing him such irritation as to oblige him to cough considerably. Here then was embodied the source of the mischief; a considerable enlargement had taken place in the liver, which was sufficiently perceptible at the margin of the ribs; this enlargement no doubt extended deeply into the organ, and equally pervaded its upper surface; the consequence then of this alteration of structure was, to curtail the usual space of the thoracic viscera, by the pressure made on the diaphragm, the natural effect of which would be, by the confinement induced, the teazing cough so frequently present in such cases.

He was immediately placed on a course of mild deobstruents, in addition to which an application was directed for his side, as prescribed in the former edition; and when a mild yet decisive impression was effected on the absorbents, the following medicines were ordered:

℞ Infus: Rhei, ℥ss.
Magnes: Sulph: ʒss.
Magnes: Calcin: gr. vii.
Pulv: Acaciæ, ℈ss.
Sacch: Purif: ℈i.
Tinct: Aloes,
Tinct: Sennæ,
Tinct: Aurantii, ā ā m. xx.
Mist: Camphoræ, ʒvi. misce.
Fiat haustus, ter die sumendus.

℞ Sodæ Subcarb: Exsic: ʒi
Ext: Humili:
Ext: Sennæ,
Ext: Rhei, ā ā ℈ij.
Ol: Anthem: gtt. iv. Fiat massa, in pilulas xxx distribuenda, quarum duæ una hora ante haustum superum capiendæ.

A few days after his being under my care, a decided amendment took place; the cough became less troublesome, his breathing more free and less impeded, and the cough had almost subsided, the pulse daily lessening in frequency, and the general hectic heat gradually abated: at the end of eleven weeks no traces of disease were discoverable.

Mrs. P——, of Phillimore Place, Kensington, of a thin and delicate frame, about 38 years of age. Her complaints were a severe cough, with much oppression of chest and laborious breathing for some time, and to that degree, that the least motion in moving up or down stairs, occasioned such distress in the respiration, as rendered her unable for a while to speak; she had been under the care of several medical gentlemen, who had prescribed for her a variety of pectoral medicines, without any lasting relief. The source of her cough and pulmonary symptoms I soon discovered to be seated in the liver, the upper lobe of which being enlarged, pressed on the diaphragm, and thereby confined the situation of the lungs, which not being allowed their proper expansion, were impeded in their functions; the lower edge of the liver was much thickened, which led me of course to consider that its upper surface might have assumed the same altered state. In a few days, from this view of her disease, I was enabled considerably to relieve her, and at the expiration of six weeks, she was perfectly well.

The preceding cases place in a stronger point of view (what has been only casually noticed by former writers) the strong influence which a disordered condition of the liver has on some of the principal organs, particularly on the pulmonic system. From not having a thorough knowledge of this fact, some of the first professional characters have been misled, both in their prognosis and treatment; hence, we cannot be too much on our guard, in all cases where the lungs are affected, in investigating whether these organs, or the liver, are the primary seat of the malady, and the central and active source of the morbid excitement.

CHRONIC HEPATITIS.

CASES.

L——, Esquire, a gentleman, 38 years of age, after a residence of ten years at Bengal, returned to this country, two months after which he felt himself indisposed, and complained of great debility; considerable pain, resembling rheumatism, was felt in both shoulders, more particularly occupying the left one, attended with a dull heavy pain, occasionally in the right side; these symptoms were attended with considerable depression of spirits; his skin was hot and dry, more especially the palms of the hands, which towards evening felt exceedingly uncomfortable, with a mottled appearance and burning heat; the appetite was good, rather keen than otherwise; his nights however were restless, and often interrupted by frightful dreams and distressing apprehensions; the pulse was but little affected; there was no increased thirst, yet in the morning the tongue at the root part was coated with much thick mucus.

After having ascertained these particulars, I examined the region of the liver, where, on pressing my finger, he described it as occasioning him much uneasiness and pain; the alvine excretions were particularly unhealthy. I prescribed him a course of medicines so as to alter the deranged functions of the liver, and thereby repair the faulty bilious secretion, by which means his recovery was effected in six weeks.

In January 1814, I was consulted (by letter) by a gentleman of Southampton, who was recommended to me by his relation, whom I had attended in town with an affection of the liver, and who at this period was on a visit to him; and as the description given of the complaint was tolerably accurate, I prescribed medicines for the case.

Southampton, January 4, 1814.

Sir,

Having been strongly recommended to consult you on my case, by Mr. H. late your patient, and not having it in my power to quit home, I considered if I drew up a statement of my sufferings, you might be enabled to render me some service.

I have been getting very poorly for these last three years, and which of late has much increased; my age is 42. I at times have a dull heavy pain about the shoulder blades, occasionally feel a fulness and tightness of the right side, always after dinner I feel full and much inclined to sleep; my appetite is good, I eat of nourishing kinds of food, yet feel weak, and any trifling exertion fatigues me; I have no thirst or fever; towards evening, my hands are dry and hot, my nights are disturbed by distressing dreams, my stomach and bowels seem always full of wind. I am generally costive, yet occasionally the bowels are relaxed. Often when I go to motion, I have much straining, and little or none comes away. My water is nearly as pale as spring water. I am much cast down in my spirits. If you are from these particulars able to render me benefit, I shall ever gratefully acknowledge the same.

I am, Sir,

Your obedient humble servant,

J. N.

To Mr. Faithhorn, Surgeon,
Berners-street, London.

From the above plain statement it appeared, that the biliary secretions had long been in a highly deranged state, and that there prevailed an irregular condition of the bowels, such as sometimes attends a flow of the bile, or other times its total occlusion, or imperfect formation; this was evidently caused both by a slow or impeded circulation of the organ, and by a

quantity of spissated gall or mucus, obstructing the biliary ducts, and likewise lining the surface of the bowels, thus preventing the flow of the bile into the duodenum. In my directions, therefore, two objects were to be attended to; the first was, to remove the vitiated mucus, which had accumulated in these passages; the second, to give the due action to the liver, by which its functions might be properly carried on; both these points were happily accomplished by the plan recommended, and in the space of three weeks I succeeded in giving him complete satisfaction, his health being greatly restored; and from the perseverance of a month longer, with some addition of tonic and other invigorating remedies, his constitution was so amended, that he declared in his last correspondence to me, that his spirits and general frame of health appeared to him as vigorous as ever.

A similar case to the above was sent me from Bristol, in consequence of the patient having read in my Treatise the success which had attended my practice with the Southampton patient: his letter, giving the detail of his sufferings, is as follows:

Bristol, January 18th, 1815.

Sir,

I have just purchased your work on Liver Complaints and Bilious Disorders, in the hope of ascertaining, if I could obtain advice and relief, by consulting with you respecting an indisposition under which I have been labouring for these four or five years past.

I am induced to hope, Sir, you will favour me with your advice, as I perceive in the list of cases in your publication, there is one from a gentleman of Southampton, who consulted you by letter, and happily received great benefit. As concisely, therefore, as I am able, I will state my case to you.—I will first premise, that I have twice applied to two eminent physicians of Bristol, but have not derived much advantage

therefrom; some benefit I have certainly received, but I believe it has arisen from attention to the diet they prescribed, rather than the medicines; and though I do not feel so ill as two years since, yet I am now far from enjoying comfortable health.

My symptoms greatly resemble those of the above named gentleman, though perhaps I have them in a somewhat slighter degree.

I have felt unwell for the last five years; and almost constant depression of spirits oppresses me; frequently feel a dull pain low in the right side; a sense of fulness after dinner (and more depressed then); an irritability which affects me on the slightest occasion, and often produces great nervous distress; want of presence of mind, which affects my memory; and a great reluctance to enter any society, or engage in any enterprize. I have in general a good appetite, though my food does not strengthen me as I have found in early years. I am nearly 28 years of age, and as a boy enjoyed remarkably good health and spirits, have always lived temperately, never exceed two glasses of white wine after dinner, and have drank water for these four or five years past.

I must likewise mention, that I am generally costive, attended with piles, and am never comfortable without having recourse to aperient medicine; I have derived relief from a prescription which a friend advised me to try, consisting of fifteen grains of rhubarb, with three of ipecacuanha; this affords me relief, and I always feel more cheerful the following day; but when I omit it, my old feelings return. I forgot to add that I make water in a very sparing manner, and discharge it with feebleness, though in this particular I am not so ill as one or two years since.

The above plain statement, Sir, will, I trust, enable you to

recommend me means that will restore me to a state of sound health, to which I have been so long a stranger.

I remain, very respectfully yours,

W. B.

On the above case, I have only to add, that in his last letter, dated March the 10th, he expressed in the warmest manner his gratitude to me, for his complete recovery.

Mr. P——, a gentleman of a firm muscular habit, and in stature rather above the middle size, who had been long in business, and at the age of 65, retired from active life, began in the course of a twelvemonth to be much troubled with symptoms of indigestion, flatulence, and occasional pains of the right side, extending to the top of the shoulder; in the early part of the day, he was tolerably well, but immediately after a full meal, felt much distension, pressure, and uneasiness; his nights, if not sleepless, were much broken and interrupted by a slow hectic, which occasioned considerable irritation, his look was sallow, the eyes had a dull yellow tinge, were heavy and oppressed, his bowels were irregular, but generally constipated, his urine in small quantities and high coloured; this train of symptoms had been gradually increasing, and though not such as to prove highly alarming, yet they rendered him in the highest degree uncomfortable, and preyed on his mind and spirits in a wonderful degree: in this state, exercise was a burthen, and he could not relish any thing that was attended with exertion, or created any activity on his part; what he formerly took pleasure in, was now irksome and distressing, and he seemed to possess the real tedium vitæ, with every means of enjoyment in his power.

On being called in to him, I entertained no doubt of the origin and nature of his complaints, and on examining the region of the liver, there was felt some slight uneasiness on pressure, and the margin, though not sensibly enlarged to the touch, was firmer and fuller than it ought to be; the alvine excretions were of a dry, firm, and comprest appearance, wanting both that mucus destined for the purpose of lubricating them, and also that yellow feculent character, which shews a proper mixture of the biliary secretion, and in its due quantity.

In directing the treatment, the first step I considered necessary, was to give action to the biliary secretion, by affecting the liver, and also expediting its secretion through the intestines; the consequence of this was, that the state of the system became very soon altered, the power of the stomach was improved, and the process of digestion rendered active and correct; the same change was operated on in the bowels, the secretions of which acquired their true saffronous bilious tinge, were less tenacious and firm, and became covered with a thin layer of mucus; these changes were rapidly followed by a return of health, animation, and spirits, and a total loss of the unpleasant symptoms which had for a long time past embittered life. The patient resumed with alacrity his former habits, entered into the society of his acquaintance and friends with satisfaction, and saw every thing in that agreeable light which attends a healthy body and contented mind. The same plan was continued for some time; and so sensible was the patient of its advantages, that he would by no means give up his medicines for some time after I had considered them as no longer necessary.

F——, Esquire, of Harley-street, Cavendish-square, was under my care for a chronic affection of the liver, the symptoms of which were confined to acute pain about the shoulder blade, and restless uneasy nights. On examining the side, I found the lower surface of the liver thickened and somewhat hardened. He was immediately put on a proper course of deobstruents, with suitable instructions, when at the end of two months his health was entirely re-established.

In December last, I was requested to visit W——, Esq. of Baker-street, aged 47, who had been ill twelve months; he was of a sallow complexion, appeared much emaciated at this time, and laboured under an exquisitely formed hectic fever; his stomach was irritable, and much affected with nausea and vomiting, more particularly on the taking of solid food; he had also a slight cough, some tightness in breathing, a considerable degree of dry burning heat pervaded the whole body, the tongue appeared dry without any mucus covering, pulse was hard and quick, with irregularity, and he experi-

enced excessive thirst. On examining the abdomen, I observed some considerable fulness of the right hypochondriac region, acutely painful to the touch, and on much pressure, nearly occasioning fainting.

From the appearances altogether, I felt scarcely any doubt that suppuration had taken place in the substance of the liver, but as it did not point favourably for the success of an operation, none could with propriety be adopted; however, at the end of a fortnight the abscess burst, and nature, most fortunately for the patient, emptied the matter through the biliary ducts, and it continued to pass by the bowels for three weeks; from this period the fever and other symptoms gradually subsided; by mild tonic medicines, joined with some deobstruents, and a carefully arranged diet, he, to the astonishment of all his friends, in the space of three months, regained his health.

Mrs. K——, of a tender and nervous constitution, came out of Essex, to place herself under my care; she had been ailing four years, and had sought relief from several of the faculty, without any permanent benefit. She complained of a pain in the left side, distress in the stomach after meals, more particularly after dinner, which would often be rejected, greatly annoyed with flatulence in the bowels, her tongue clean, without fever or thirst, appetite unimpaired, her nights were restless, being much disturbed with frightful and alarming dreams, the palms of the hands generally felt hot and burning, bowels were irregular, and her mind seemed under the influence of considerable depression. Judging from the outline of these symptoms, that the liver might be the primary and only cause of her sufferings, I was led to examine the side, when I discovered a fulness and some hardness of the edges of this organ, the secretions of the bowels were in quantity scanty, and in quality egregiously incorrect. The first step I proceeded on in this case, was to cleanse well the alimentary canal, with the medicines as prescribed in the former edition, a combination I have always found of the highest utility, both for its correcting and evacuant properties in the first instance. To judge of such combinations, experience is the criterion, not theoretical reasoning; and here the opinion of that eminent physician, Dr. George Fordyce, justly applies with considerable effect, who has remarked, that the combination of differ-

ent substances often exerts a peculiar action, which their separate administration cannot produce, and particularly in those medicines directed to act on the first passages. At the end of seven days, finding the functions of the kidneys were torpid and inactive, I found it necesesary to make the following change, suited to rouse these glands, and to complete my general principle of stimulating and rendering more active every emunctory having a connection with, or influenced by the secretion of the liver:

℞ Pil: Gambog: Comp: gr. viij.
Hydrar: Submuriat: gr. iv.
Sap: Venet: gr. iii. M. ft. bolus.
Hora decubitus sumendus.

℞ Potass: Acet: ℥ss.
Sp: Æther: Nitros: ʒiss.
Infus: Rhei, ℥ij.
Tinct: Sennæ, ʒiij.
Mannæ: Opt: ʒij.
Aq: Distil: ʒx. M. ft. mist.
Sumt: dimid: cras primo mane et repet: rcliq: 2 hor: postea.

After these medicines were taken, I still proceeded on the same arrangement of principle that kept the great cause of disease, the liver, in view, which by being brought to a more correct action, it consequently was enabled to secrete its bile more perfectly, by which means the spirits and strength of my patient became improved, and her general health was regained at the end of nine weeks.

C——, Esquire, of Wimpole-strect, aged 42, of short stature, and rather of a full make, had throughout his life, until within five months, enjoyed a good share of health. On his application to me, he complained of tightness over his eyes, with a general state of lassitude and debility, much depressed in spirits, and inclined to melancholy, his countenance was sallow, with a considerable heaviness and dulness of the eyes, appetite so increased as often to make him think that

enough was not provided, and he ate his food with much eagerness (this symptom I have often noticed in hepatic obstructions); bowels constipated, and when acted on, the operations made with much straining, effort, and difficulty, with but a small discharge, pulse good, and had no particular thirst. The secretions were highly incorrect and vitiated, the abdomen felt hard and distended, and the edge of the liver was much thickened. The first consideration in this case, was to take off the determination of blood to the head, by brisk cathartics, preceded by cupping at the back of the neck, after which, in order to render the action of the hepatic organs more perfect, he was put on a short course of deobstruents, which speedily rendered the natural softness and ductility to the hypochondriac region, and in five weeks his complaints were completely removed.

Mr. P——, 44 years of age, who had passed several years of his life at Jamaica, had, until within these two years, been of an active and cheerful turn of mind, but something had for many months so preyed on his spirits, as to render those things which were formerly the most comfortable and agreeable to him, now the most burthensome and distressing. On his application to me, he observed he could not account for that dull and heavy state of oppression he experienced ; no pain was felt, his appetite good, and the only symptom which he particularly noticed to me was, his being troubled with immense quantities of wind, and in such abundance as obliged him frequently to be throwing it off the stomach, which, from the noise it often occasioned, used to perplex and vex him exceedingly ; his general countenance appeared cast down, pulse rather depressed, his sleep was heavy, and he did not awake as he formerly did, but felt a great exertion required to rouse himself; bowels acted daily once, but this operation was performed with much difficulty and straining effort.

Judging from the large collections of wind which were constantly generating in the stomach (and which could not possibly be formed if the biliary and gastric fluids were in a correct condition), that the liver did not perform its office with that necessary energy required, I was led to examine in what state the organ felt; this I did, and could not discover any thing from which to draw a practical conclusion, as there was neither sensible enlargement nor induration; I then proceeded to ob-

serve the secretions with diligence, and here I obtained such full and sufficient evidence of their unhealthy character, as completely to satisfy me, that the primary cause of this patient's despondency, and large accumulation of wind, originated from the morbid and imperfect bile, which the deranged organ had been for a long period secreting: thus, having obtained from this accurate test, such unequivocal intelligence as to the nature of this case, I felt no difficulty in assuring my patient, that, by attentively persevering in the deobstruent arrangement which I should prescribe for him, he would obtain in a short time a return of general health and spirits, which was fully attained in the course of eleven weeks, by rousing the torpid liver to such energy as to be capable of secreting its fluid correctly in quality and quantity.

Mr. H——, of Gower-street, after a residence of seventeen years on the Malabar coast, was of late affected with a dull heavy sensation in the right side, to which was joined a stiffness and inability of the ankles and knee joints. A particular sense of heaviness always seized him after dinner; the pulse was in no way affected. On examining the right side, it appeared fuller than the opposite one, and the edges of the liver were evidently hardened and sharp. The diet and medicines prescribed were strictly persevered in for seven weeks, at which period he was perfectly restored.

In the above case, besides the liver, the body in general felt tense, full, and protuberant, and the abdominal veins were more conspicuous and turgid than natural; such distension, accompanied by an enlargement of vessels, and other marks of venous phlethora, are usually the forerunners of much mischief, by indicating that the exhalent vessels have got the mastery over the absorbents; the latter, therefore, if not speedily supported and reinstated in vigour, will allow of those morbid lymphatic invasions, which, if not timely checked, lead on to serious and eventful devastation.

Miss D——, of Beaumont-street, of pale complexion, aged 24, had not been well for a length of time; at the period I was consulted, she informed me her spirits were exceedingly

low and depressed, that every thing around her appeared dreary and dismal; every effort made in her power to oppose this melancholy was without effect, her head often felt tight, and occasionally was attacked with giddiness; her remaining long in a confined situation, or any particular effluvia arising even from dinner, would often bring on fainting; the slightest circumstance usually caused a flushing of the face, which, after dinner, or on taking a glass of wine, became highly and distressingly so; she was subject to very cold feet, appetite irregular, a good deal troubled with flatulence, and fulness about the pit of the stomach; her nights' rest were tolerable, pulse small and depressed, no thirst, neither was the tongue affected; bowels confined.

On viewing the secretions, they betrayed sufficient evidence of incorrectness, both in quantity and quality, causes fully adequate to derange the proper economy of other organs, which generally sympathize with a disturbed liver. In this case, those principles were enforced which were capable of unloading this gland of its impure bile, and bringing its action to that standard suitable to the secretion of a more healthy kind, and in accomplishing this, which was effected in rather more than seven weeks, my patient's recovery was perfected.

A gentleman, aged 42, of a slender make, rather tall in stature, and of an atrabilious and nervous temperament; had been indisposed five or six years. The symptoms on his application to me, were a dull heavy pain of his right side, at times experiencing the same uneasy sensation of a sharper kind at the back, particularly below the right shoulder blade; his nights in general disturbed, accompanied with distressing dreams, tongue appeared much coated at its base, pulse irritable and considerably accelerated; every exertion, however trifling, irritated and fatigued him, and had an evident influence on his pulse; his bowels were chiefly constipated, but at the same time, in such an acutely sensible state, that the mildest description of purgative or aperient medicines so irritated and harassed them, that the constitution was unable to recover from the effects of their over excitement for some days. On examining the region of the liver, it felt tender on pressure, and somewhat fuller and firmer than in a healthy condition, while the parietes of the abdomen shewed a degree of tension, and were not so ductile and yielding as natural, marking as if

there had existed formerly some slight peritoneal inflammation. The congestion of the liver, and the consequent remora of blood through its portal circle, which was made more manifest by the occasional rupture of the hemorrhoidal vessels of the rectum, and by the relief he invariably experienced from their discharge. The preternatural and highly irritative condition of the bowels here exhibited, required the most cautious mode of proceeding; indeed, no cases, in their treatment require so much nicety. A gradual and well-regulated course of demulcents and deobstruents, assisted by the application of leeches to the verge of the anus once a week, and his rigidly conforming to the arrangements suggested, his complaints, at the end of thirteen weeks, were completely removed.

This case furnishes much scope for reflection and observation. From the congestion of the liver, it is evident that a greater quantity of blood must necessarily be imposed on the other abdominal viscera, and in some cases it more especially (as in the instance above) becomes in a greater degree determined to the intestines, thereby producing a phlethora or over-distension of their vessels. Such vascular excitement, extending to the delicate internal surface, or mucus membrane, must render the bowels of course painfully susceptible to the mildest form of purgative, or other laxative stimulus. Similar cases I have often met with in practice, and they require much experience and discrimination in ascertaining the real or primary cause, as well as its consequent effects, so prominently distressing in this preternatural and supersentient excitability of bowel.

V——, Esquire, of Devonshire-place, aged 59, of a tall thin make, had in general enjoyed a good share of health, which was interrupted, during the last three months, by a considerable drowsiness and disposition to sleep, which, after dinner, was so much increased, as required great exertion in order to prevent his falling asleep. He was much annoyed with large collections of wind in the stomach, and generally felt oppressed after meals; had pains occasionally running over the left side, was without thirst, with a regular pulse, had of late been losing flesh, more particularly so about the face, which appeared greatly emaciated; bowels irregular, felt a general weakness and debility, every trifling exertion fatigued him; his rest of a night was pretty good, yet, in the morning he felt tired and unrefreshed, with as much seeming weakness,

as if he had not rested at all. This latter circumstance is a frequent attendant in these complaints, and usually indicates an improper chylification, from the deficient powers of the absorbents, occasioned by the torpid liver. Absorbent and deobstruent remedies were employed to energize this organ, and correct its secretions, which were materially wrong. In strictly keeping to the regimen enjoined, and these means, his health was regained in a month.

Mrs. W——, of Charlotte-street, aged 34, lusty, and of a plethoric habit, who had been married ten years, and the mother of six children; for these last fifteen months had felt herself extremely poorly, and on her consulting me, complained of much tightness and oppression of the chest, with some obstruction of respiration, almost constant head-achs, with occasional giddiness, to such a degree, as often to make her afraid of falling; no thirst, appetite somewhat impaired, was largely troubled with wind, both in the stomach and bowels, the catamenia regular, bowels constipated, and when operating, discharge very sparingly, and that with great straining exertion; the skin felt hot, dry, and burning, pulse in a measure depressed, countenance leaden and sallow, with weight and heaviness of the eyes. After having observed the secretions, which were exceedingly improper, I examined the right side, but could not detect, from the feel of the liver, at this part, any alteration, although, from the symptoms and state of the secretions, there remained no doubt on my mind that the upper part of its surface was considerably diseased. The first step I took in this case, was that of cupping from the nape of the neck; with a pretty strong and brisk cathartic, followed by drawing blood from the hypochondriac region with leeches, and then directing her strictly to persevere in the deobstruent arrangement advised, which after being taken a week, began to operate on the functions of the liver, as was evident by the improved condition of its secretions; amendment was progressive to the return of health, which was established in rather better than six weeks.

O——, Esquire, of Orchard-street, aged 36, of a thin delicate habit, had found himself not altogether well for near ten months; at the time of my seeing him, his principal ailment was a constant disposition to drowsiness, and to that degree did it prevail after dinner, that it was with much difficulty he could keep himself awake; he was likewise much annoyed with large collections of wind in the stomach and bowels, his spirits were much cast down, and the depression had of late so much increased, that it led him to retire from society, which at this time was highly offensive to his state of feelings; appetite continued unimpaired, he was without fever, his eyes and countenance evidenced a deep dejection and disquieted mind, the bowels operated once daily, but in a very scanty and ill-conditioned manner; he felt irritable and fretful from the slightest cause, and altogether seemed greatly disordered.

Having often found these symptoms brought on by an imperfect secretion of the biliary fluid, I was led to inspect the condition of the liver, and in what manner it performed its functions, both of which were far from being right; the abdomen felt full, hard, and tight, more particularly at the margin of the ribs near the liver, which was much thickened about its edge. I instantly employed the measures calculated to bring the liver into more action, in order that the bilious secretion might thereby be increased, which was gradually accomplished, to the entire recovery of my patient, in less than eight weeks.

Miss V——, of Welbeck-street, aged 25, of a full and robust constitution, with a florid complexion, had felt herself poorly these four months, and had gradually been getting worse. On her consulting me, she complained of constant head-achs, with giddiness, and a kind of dimness over the eyes at times, a full heavy pain at the pit of the stomach, pulse rather oppressed, no thirst, appetite but slightly impaired, bowels inclined to confinement, the catamenia regular, but lessened of late, very little exertion fatigued her, and if placed in a confined situation, she was apt to faint away, was much troubled with flatulence, could not without some difficulty keep herself awake after dinner. In closely investigating the nature of this case, I found some thickening at the edge of the

liver, and some sensibility on pressure over it ; the secretions of the bowels were small and vitiated. I ordered her to be cupped over the right side, which operation was repeated in five days ; and as she was of a plethoric habit, ten ounces of blood were likewise taken from the arm ; the bowels were well discharged ; and by bringing the liver to form its bile in a correct quantity, and of a more healthy quality, by deobstruent and other auxiliary medicines, her health was entirely regained in less than seven weeks.

Mrs. N——, of Edward-street, aged 34, of a plethoric temperament, had been suffering from indisposition four years previous to her application to me ; when she complained of a pain in the left side, which she had experienced at intervals throughout her illness, but of late it had been more constant and increased, she was troubled with a teazing cough, which had resisted the pectoral remedies prescribed, was highly irritable and nervous, and from the slightest cause appeared greatly agitated, the pulse hard, irregular, and frequent, rather thirsty, with a thick mucus covering the tongue near the throat, bowels irregular ; a considerable increase of heat pervaded the surface of the body, more particularly the palms of the hands. These symptoms were so indicative of hepatic distress, as led me to entertain scarcely any doubt as to the primary source of the mischief going on, and which an examination entirely confirmed ; for I instantly discovered some extensive enlargement of the liver, which was acutely sensible to the slightest pressure ; the secretions likewise betrayed a strong evidence of their being poured out from an irritated and disordered organ. This case required some energy of treatment, as from the altered structure of its surface, it appeared to have been for a length of time suffering from disease. My patient most strictly adhered to the regimen and medicines recommended, which by a steady perseverance in for ten weeks, entirely re-established her health.

Colonel L——, of a full habit, had resided many years in the East Indies, and while there, had been attacked with acute hepatitis, which had so considerably broken his health, as to

oblige his return to this country, in order to repair the consequences of this formidable malady. In the course of the voyage homeward, he seemed recovered, as no remains of hepatic affection were experienced. Upwards of two years after his return, he was seized with a severe cold, which left behind it much weakness, considerable langour, and a general unnerved state. To remedy this, he had recourse to the usual palliatives, of country air and mild tonics; notwithstanding which, he made but little progress towards the restoration of his health. At this period I was called to him, and on learning the history of the original hepatic disease, I had scarcely any doubt that the chronic affection had gradually succeeded the acute complaint; that the liver, impeded in its circulation in consequence of previous derangement, was no longer able to secrete the bile in the due proportion, and that the whole symptoms which now attended him, as listlessness, stomach ailment, slow fever, and impaired action of the intestines, were to be traced to this morbid source, and only to be removed by ameliorating the state of this organ; it was also clear, that the attack of catarrh had brought the dormant hepatic disorder more into action, and hurried on the liver disease to its present aggravated condition.

On examining the liver, I found that it evidently gave pain on pressure; there was a slight puffiness and tenderness of its margin, although its general size did not seem much enlarged; his urine was generally pale, yet at times would shew a high saffron colour; the motions were light, clayey, partly soft, and partly comprest, without the appearance of due assimilation.

Having so far satisfied myself of the patient's situation, I entertained no doubt of his recovering, by attention on his part to the rules I should enjoin; he was immediately put on a course of active deobstruents, to restore the energy of the liver, and expand its circulation, by which the biliary secretion might be increased, and thereby give activity to the bowels, both for assimilation and discharge; in the course of ten days the bowels began to betray those symptoms of gripings and heats, which most usually attend an increased secretion and discharge of bile (where previously it has been long confined); the alvine matters assumed of course a more natural and healthy appearance and bilious colour, the distress of the stomach gradually gave less uneasiness, the appetite became improved, and the symptoms of fever that harassed his nights, by degrees abated and wore off; his strength and health by a strict adherence to the same arrangement for two months,

were completely recovered. Upwards of three years have now passed, and he has experienced no relapse.

Sir,

Having read your publication on liver complaints, I am induced to consult you respecting my own case, which has been of long standing. Two years last January, I was taken suddenly with a violent pain over the left temple, a tight pain in the chest, accompanied with a cough, which for some months was very slight, after which it became more serious, and brought on pains in the sides. I can now only lay on the right side; I have almost constant pain in the shoulder-blades, bowels generally confined, tongue foul in a morning, frequent sickness, spirits at times greatly depressed.

I was for some time under the care of a medical gentleman, and became gradually better; I continued mending until February last; at which time, I had a return of my former complaints, more acute than before, with an increase of disease. The medical gentleman who has lately been attending me, appears to have been treating me as if he considered mine was an affection of the lungs; but, on reading the case of Mrs. K. I am led to think that I am in a similar way, for I am always uneasy after meals, and can get no rest of a night, hands and feet always dry, and burning hot.

I have given you as clear a statement of my complaint as I can; if you think you can do me any good by sending me medicine, or if my being in town will be attended with more benefit to me, I will immediately, on hearing from you, come to town, where I will submit to every direction you may judge right to prescribe, as I have great confidence in your judgment, the great experience you have had must of course have given you advantages which few in the profession can

have acquired.—It might be right for me to inform you, that I am married, and have had no family, and now in my 29th year.

Sir, respectfully yours,
P. L.

Newmarket, Suffolk, April 2, 1815.

I have the gratification of saying, the above lady was under my care (without leaving home) ten weeks, in which time her health was completely restored.

The subjoined highly important case, containing the history of a long continued affection of the liver, deserves every attention from the reader, as the subject of it is himself a professional character, who had been exposed for a series of years to the most powerful causes that induce hepatic disease.

Colchester, 4th May, 1815.

Sir,

Having met with a friend of mine, who informed me that he had been under your care for an affection of the liver, and that you fully re-established his health, after a most serious and long indisposition; I am, from the favourable result of this case, induced to consult you on my own. I am of the profession, and have had the satisfaction of succeeding in the cure of many chronic and other affections of the liver, but in my own case, I have from my treatment not met with the wished-for success.

You will first read a brief statement of the origin of my primary attack, and then see the most prominent symptoms under which I am now suffering. I shall wait your direction

by letter, until I can come to town, which I hope to be able to do 'ere long.

I am, Sir,

Your most obedient servant,

T. S.

"In the year 1809, I went on the expedition to Walcheren, where I suffered from the endemial fever of that island, which proved so destructive to our army. After my return to this country in November, I laboured under a chronic inflammation of the liver, which became enlarged, and painful to the touch. I continued for many months in this country, with all the symptoms of the above-mentioned diseased state of the liver. Mercury was used for some time as an alterative, and when I became convalescent, I embarked for the West Indies, and arrived at my destined island in February 1810, in a much better state of health, and suffering very little from the disease of my liver, that organ appearing to have regained its natural healthy state, allowing me with little interruption to remain well during a residence in that unfriendly climate nearly two years and a half.

"In 1813, I was on service with the army in Holland, and underwent (during a very severe winter) a most arduous campaign without illness, and returned to England in June, 1814, in perfect health; but in the month of August following, after leading rather a sedentary life, I was again attacked with much the same chronic affection of the liver, which has continued with but little amendment, and now left me in a state, of which the under-mentioned are my most urgent symptoms —viz.

"Pain in the right hypochondriac region, with a fulness at the edge of the cartilages of the false ribs; this pain is increased after any meal, more especially after that of animal food; pressure with the finger produces additional pain, even the watch if worn high in the common fob, causes great uneasiness, the side sometimes feels as if it had been bruised by a blow or a fall; when in bed, the easiest position is lying on the affected side; my nights are generally passed in a restless and watchful state; pulse usually quick and small, but without hardness; there is a general langour and lassitude, with diminished energy of the mind and body, anxiety and concern about things of minor importance, head-ach, constant drowsiness, and after dinner a disposition to sleep, and if that takes place, it is not often of the refreshing kind; at this time

the skin is generally hot and dry, particularly the palms of the hands and the soles of the feet, throbbing of the temporal arteries, &c.; tongue of a yellowish white appearance, which is more obvious on rising in the morning, with a dry and gummy state of the mouth and fauces, which continues, although in a less degree for some time during the morning; appetite always good, constant costiveness, and the egesta seem to bear no proportion to the quantity of food taken into the stomach, which generally feels distended; there is sometimes flatulency after taking in food of any kind; the evacuations are small and usually of firm consistence, sometimes not much larger in size than a common tobacco pipe, with a rough or grooved surface, appearing as if they had been squeezed through a small and irregular passage or pipe, lined with sand or common scouring paper; they are often mottled, or of different colours; at the same time, frequently they are passed so, that what has been taken as food appears in its original state; the most common articles which I have observed in the fæces are potatoes, raisins, or dried currants, suet, or such like things that are the most difficult of digestion; sometimes the stools are of a whitish brown colour, but in general they are of a too light colour, denoting great deficiency of secretion of the bile. After aperients have been used, the first loose stools are of a darker hue, and often they are of a blackish brown colour; but when the aperient, or alterative medicines are discontinued, the evacuations assume their usual light colour, resembling darkish clay.

"The exercise of walking causes a distressed pain, or dull heavy weight to be felt between the shoulders, preventing the full extension and free motion of the arms; but this peculiar sensation, excited by exertion, is very difficult to be described, or conveyed to the feelings of any other but those who have experienced it. This state of the liver has been somewhat alleviated by horse exercise, abstraction of the mind from concern or care of any kind; regular diet of the most easy digestion, to the exclusion of *all* fermented liquors, assisted by native country air during a mild spring, and the regular exhibition every night, or other night, of an alterative pill, and twice or thrice a week, taking a small quantity of the sulphate of magnesia, diffused in a large portion of water."

This gentleman having placed himself implicitly under my direction, I laid down a plan of medicine and regimen, which he strictly adhered to for three months, when his health was

completely re-established. After the first fortnight he came to town, when I had an opportunity of paying particular attention to him, which better enabled me to make those progressive alterations, which long continued and obstinate cases, such as the above, require. From this case it may be observed, that the danger of relapses, in constitutions which have acquired the disease in a warm climate, shews the necessity, on their return to this country, of attending most minutely to the state of the hepatic functions.

Mr. G——, residing in Sloane-street, who was of middle stature, and rather of a full habit, aged 39, had been suffering from ill health three or four years, complained of having almost constant head-achs, with a general torpor of the whole frame, some slight sense of fulness at the pit of the stomach, frequent and considerable pain in the back and loins, and for which he had sought relief from various professional men, but without receiving any permanent or lasting benefit; feels often aching pains of the limbs, cramp, twitchings of the tendons; and frequently a pain in the left side below the shoulder blade, or rather towards the lower edge of it, and inclining to the back; bowels mostly confined, and what does pass, is with much straining effort, discharges but little urine, which is generally of a high colour; pulse slow and depressed; but of all the symptoms the most distressing to him are the pains of the back and loins.

On making pressure over the hypochondriac region, I felt the edge of the liver much thickened, and very painful if the finger pressed deeply; the abdomen altogether was full and tense; the secretions of the bowels were highly out of order, and shewed of themselves, sufficient evidence of a torpid and depraved biliary secretion.

These symptoms of pains in the back and loins are frequent attendants of an affection of the liver, for the organ here influences by contiguity and pressure, the investing membranes of the back, and communicates, through their medium, to the muscles which direct the motions of these parts: From the situation of the pain, it is too generally mistaken for a disease of the kidneys, gravel, or an attack of rheumatism in the form of lumbago, and the plan of treatment is accordingly pursued directly opposite to that suited to the nature of the disease. If, however, in these cases, the practitioner would carefully attend to the state of the liver, and its disturbment of func-

tions as exhibited in the fecal discharges of the patient, he soon would be sensible of his mistake, and enabled to develope the before hidden source of aggrievement; and by adopting his plan, properly to emulge this organ, and restore its functions to a regular and healthy condition, the malady would commonly be removed, and the same success attend his exertions as detailed in the preceding case, where perfect health was regained in seven weeks.

In the early part of this year I attended a gentleman in the neighbourhood of Grosvenor Square, who had some time since retired from an official situation in the East Indies, where he had resided upwards of twelve years.

Previous to my attendance, he had been under the care of two eminent physicians. When I first visited him, he had been labouring under the attack of jaundice for some time, which was unusually severe; this attack was preceded by pain and great sensibility at the pit of the stomach, which was much increased every time he took solid food, his pulse was exceedingly quick and irregular, with much tightness, indicating, certainly, considerable mischief; his tongue was covered with a duskish yellow coating; his countenance and eyes displayed a deep yellow tinge, inclining to brown, which was diffused in the same degree over the whole body, while the skin felt extremely parched, hot, and feverish.

The examination of the hypochondriac region, discovered great tension and uneasiness of the liver, which extended here and there over the whole abdomen, the membrane feeling, as it were, unyielding and thickened; to the symptoms already stated, may be added, that on his making an attempt to extend the body, he felt oppressed and uneasy, with a disposition to cough, bringing up some tough phlegm with much effort and difficulty: indeed, his case altogether presented a dangerous aspect, and his friends were under considerable apprehensions respecting him. The stools were, as is usual in such cases, colourless, and every part of the system betrayed the greatest irritability and sense of suffering.

The first principle on which I proceeded, was to relieve the tension and fulness in the seat of the malady, by cupping over the right side, abstracting from the part eight ounces of blood; likewise ordering the following medicine:

℞ Pulv: Ipecac: Comp: gr. xv. Fiant pilulæ tres hora somni sumendæ.

A thin gruel diet, with diluted vegetable acids, was rigidly enjoined; he was requested to keep his bed for two or three days. On the following day I found him decidedly better, with a gentle diaphoresis, and altogether more composed and comfortable; his breathing, which had previously been confined and tightened, with hoarseness, wheezing, and some slight cough, was now materially relieved, yet his bowels continued to discharge white stools. I then precribed as under:

℞ Pulv: Jacob: ver:
Hydr: Submuriat: āā gr. i.
Pulv: Scillæ,
—— Ipecac: āā gr. ss.
—— Cinnam: Comp: gr. i. Cons: q. s. M. Fiat pilula quarta vel sexta quaque hora sumenda.

Repeating the sedative pills at bed time, as first directed, he took also eighteen grains of the carbonate of ammonia, in barley water, every four or six hours, taking immediately after each dose, a table spoon full of lemon juice in water; cooling saline drinks were advised with these medicines, and a mild farinaceous diet, while a proper attention to the state of the bowels was not omitted, their action being assisted by occasional doses of different combinations of cathartic and correcting medicines.

On continuing the above arrangement a few days, the constriction of the biliary ducts gave way, as indicated by the secretions; the pulse became soft and good; the whole case presented manifest signs of improvement, and that all impediments were subsiding. He was now requested to take, for a short time, the following medicines:

℞ Potass: Acet: ʒss.
Sacch: alb: gr. xx.
Tinct: Humili, ʒi.
Infus: Calumb: ℥iss. Ft. Haust: bis, terve de die capiendus.

℞ Pulv: Jacob: ver: gr. vi.
Al: Socot: gr. xviij.
Hydrar: Submur: gr. xii.
Pulv: Ipecac: gr. x.
—— Cinnam: Comp: gr. xij. M. Fiant pilulæ duodecim, Sumat unam omni nocte.

By pursuing the above remedies, the patient soon recovered his health and spirits, and the constitution regained its former vigour.

This, then, was a case of great danger; an obstinate jaundice marked the strong and rooted hepatic affection, which was even accompanied with a slow and insidious inflammation, the certain fore-runner of disorganization and fatal disease; no benefit therefore could be expected from any treatment until this state of tension and inflammation was removed; wherever such tension, irritability, and sensibility pervades the parietes of the abdomen, our first and grand object must be directed to the measures capable of overcoming this diseased condition of the membrane; this point being accomplished, we then are enabled to proceed with those apposite remedies, corresponding with the state of the constitution at this period; by which the re-establishment of the healthful secretion of the liver will be effected, so indispensable to the well-being and security of the patient.

Contrary, therefore, to common opinion, and particularly in the case of one, who had been so long the inhabitant of a warm climate, I determined on bleeding from the part, as the most certain and approved means of relief in the first instance; the success attending it shewed the propriety of the measure; for indeed, the ulterior object of the practitioner would be frustrated without such previous and necessary depletion.

The annexed case was given me for consultation by the patient himself, a gentleman aged 33, and I here insert his own account of his complaint.

"As well as I can recollect, it may be nine months since I first observed symptoms of fulness at the chest, and flatulence of the belly, which were more sensibly felt when in a bending position. These sensations not being accompanied with any particular pain, were not attended to until about Christmas, when I was attacked with much pain at the chest, resembling, what is commonly termed heart-burn. I took several doses of magnesia, but not finding it have the desired effect, I applied to a medical gentleman, who immediately declared the complaint to be an affection of the liver. Under his care I

obtained relief, and finding myself more comfortable, I declined further assistance, hoping I was in a fair way of recovery.

" I, however, soon perceived the former symptoms returning, and found it necessary again to apply for medical aid, which I did to the same gentleman; under his directions, I took several bottles of mixture, which much relieved the flatulence of the lower part; and for the complaint at the chest, I took pills, and made use of the external application of mercurial ointment; this treatment again relieved me, and I once more, and with his consent, abstained from the further use of medicine. This may be about five weeks since; but I find, that though not now so violently affected as formerly, the disorder is not eradicated.

" The foregoing being a kind of narrative of my proceedings in the case, I shall briefly trouble you with some few observations as to the various symptoms I have experienced.

" A leading feature of the complaint has been a hot sensation at the chest, attended with a great degree of oppression, as though the end of a stick, or some substance, was forcibly applied to the extremity of the breast-bone, (at this part considerable palpitation sometimes occurs, which is so strong as to be visible to the eye), and though the hot pain has occasionally seemed to shoot to the right side, as far as to the edge of the ribs, the centre of the stomach has always appeared to be by far the principal seat of complaint.

When the disorder has given most uneasiness, pains have frequently been felt between the shoulders, and under the right blade-bone.

" Head-ach in the fore part has much attended the disorder.

" Appetite sometimes affected, but never reduced to a very bad state.

" Sleep not banished, but much shortened; frequently not being able to obtain it for a considerable time after going to bed, and when once awoke, not able to recover it.

" The general and most distressing effect has been, a very great degree of langour and debility; operating powerfully on the spirits, which prior to the manifestation of the disorder were of a lively cast.

" These particulars will probably enable Mr. Faithhorn to form a correct opinion of my case, which I am happy to say does not appear so bad as it was two months back, but still stands in need of some skilful assistance."

On examining the side of the patient, by placing him in a relaxed position, I found the liver evidently hardened and thickened at its edge, and the parietes of the abdomen felt more tense and less yielding than natural, such as marked a previous peritoneal inflammation; and, on further enquiry, I learned that a slight affection of this kind had taken place some time ago, when he experienced much uneasiness about these parts.

The practice here adopted was similar to what I have before recommended, employing such deobstruents as would soften and restore the natural ductility of these parts, confined by the morbid change, and to open the obstructed secretion; his recovery, under this system of treatment, was procured in eleven weeks.

Mr. T———, of Bond Street, aged 32, of thin make, and tall stature, had for two years been indisposed with all those symptoms which mark some obstruction of the hepatic organ, and imperfect secretion of bile. His pulse was considerably intermitting, and a sensible interruption of it could be observed three or four times in the minute, shewing an obstruction to the regular performance of the heart. This hesitation in the circulation, would vary materially, at times, as to its pauses; so violent was it occasionally, so forcible and permanent the sense of obstruction, that in bed he was obliged to start up, alarmed by a violent jerk at his side, such as marks the disease termed angina pectoris.

On observing the side and abdonien, I found much fulness, tension, and a general bracing pervade the whole abdomen. In all such cases, no practitioner is justified in laying down any plan of treatment on equivocal symptoms, until he has fully ascertained the state of the abdomen and hypochondriac region. Proceeding by that information, the same method of treatment I instituted here, as has been already pointed out in various parts of the work, and after a course of medicines and diet correctly observed, an entire recovery was obtained in nine weeks.

This case is one highly instructive, as it demonstrates that hepatic diseases may be attended with all those alarming symptoms, which mark the most fatal maladies. Physicians, therefore, cannot be too cautious in attending to the state of the hepatic organs, before they pronounce the affection either to arise from an organic disease of the heart or large blood vessels; for it is well known, that the enlargement of any organ in the neighbourhood of the great vessels proceeding from the heart, will, by its pressure, affect the circulation, and vary the state of pulsation.

We have seen the enlargement of the liver, by its pressure on the diaphragm, produce all the symptoms of pulmonary consumption; in like manner, the enlargement of the same organ at its posterior and internal part,has been known to obstruct the vena cava, and the contiguous circulation, so as to induce palpitations, intermittent pulse, and other marked symptoms of angina pectoris, and other affections resembling a disease of the heart, which affections have yielded to those means which are known to subdue hepatic enlargement; in a similar way the circulation has been affected by the condition of the intestines, when a fixed accumulation of hardened and acrid matter has been impacted in one part, which has produced the same pressure on the descending vessels; hence practitioners should be guarded, and not too hasty in forming their opinions, as they are apt, by such precipitancy, to create unnecessary apprehensions, to deviate from the proper course of treatment, and often to augment, instead of relieve, the distressing feelings of the patient. Cases of this kind I have frequently met with, and by referring them to their true cause, have generally succeeded in their cure.

This leads me to report, that a recent instance of this kind was communicated to me by a patient; it occurred in the case of a gentleman in Wales, who had long laboured under

symptoms nearly similar to the above, and had consulted several of the most eminent physicians, who all concurred, in his malady being a disease of the heart; by chance, the present publication came in his way, and on perusing the cases, he found the symptoms above described so resembling his own, that led him to consider their opinion of his disorder as erroneous, and determined him to have immediate recourse to the principles of treatment recommended in this work; by a steady perseverance in which, his complaints were gradually removed, and his health effectually re-instated.

I was consulted, the 10th of February last, by a gentleman of rank in the neighbourhood of Berkley Square, who had been ill for twelve months. The followiug is his statement, as written by himself: " I have been unwell for upwards of twelve months, am seldom without feeling a lightness and pain of the head, with frequent darting pains, as though they went through the direction of the eye to the forehead; these pains are instantaneous, and appear to go to the nerve; they sometimes alarm me, feel often a swimming and cracking sound in my ears, as though water had got into them; I also experience an oppression of breathing; pulse very irregular; frequent pains and stiffness in my knees and ancles, a want of elasticity in them; likewise a soreness of the bone under the elbow, without any appearance of inflammation; have often pains in my shoulders, cramp in my feet, a soreness in my wrists and thighs, as though I had been beaten; feel frequently an uneasy sensation in my chest, as though something had difficulty in making a passage, and this occasions dartings in my head; I sometimes experience a hardness at the pit of my stomach, with a desire to eruct for relief; on awaking in the morning, am not at all refreshed, but wearied, as though I had been much distressed in my sleep; my mouth hot, tongue dry and white, but no particular desire for drink; feel at this time my hands cramped and lifeless, as though I had lain upon them; generally relish my breakfast, and find my-

self in better spirits until about one o'clock, when I feel low and depressed; appetite tolerable, yet with no very great relish. Urine varies much, both in colour and quantity, and when passed, largely resembles spring water: then I feel extremely nervous and uncomfortable; at other times, when high coloured and less in quantity, I find myself better; the evacuations from the bowels appear, according to my conception, to want a stimulus to force them on, they frequently come from me in dried pieces, resembling a raisin or prune, coated with a fetid mucus, or matter rather offensive; at other times they are of a light spongy substance, swimming at the top of the water, oftentimes with some bloody matter, like piles, and when this takes place, I am very irritable and uneasy at my stomach, with head-ach, dimness of vision, and a sense of febrile heat and inertness."

The above case was conducted on the same principles I have so often pointed out, by which, health was regained in the course of nine weeks.

This case is one which a practitioner often meets with, where the symptoms are so numerous, varied and equivocal, that it is only by pursuing the rules laid down, of carefully noticing the secretions, that its true nature can be distinguished from a nervous malady; for nervous symptoms are the most deceitful of any which attack the system. This highly delicate organism, which makes us alive at every pore, and is the harbinger of alarm on every critical occasion, is equally deranged by an ill-conditioned state of the biliary secretion, as from any other cause; this condition is often overlooked, and nervine medicines, as they are called, are had recourse to, which consist chiefly of stimulant and spirituous drugs; such measures, although they may contribute to afford some temporary assuagement of the sensations of the patient, contribute nothing towards the ultimate recovery; nay, on the contrary, they undermine the strength of the constitution, and of the defective organs in particular, and thus rivet as it were in the habit, an increase of the very evils which they are designed to subdue.

Hence, when nervous affections become fixed and obstinate, and do not yield to that mode of treatment which is

directed to a primary affection, or diseased condition of the nerves themselves, it may be ascribed to hepatic irregularities, and by prosecuting a mode of cure connected with this principle, it will be found invariably to succeed in removing the complaint.

Norwich, May 16, 1815.

Sir,

I see in your valuable publication, which I have purchased a few days since, that you are consulted by letter respecting affections of the liver; I will therefore state my case as plainly as I can, which, in most of the particulars, resemble that of a gentleman who consulted you by letter, page 131. If you think mine of that description, from the symptoms given, I shall gratefully remember the same, if you will prescribe—and advise accordingly what I should do. I have, when in company, occasionally taken too much wine, which I feel the ill effects of, for several days, and have little or no appetite for a day or two; I lately was attacked with a severe pain at the pit of my stomach and right side, about the middle and edge of my ribs, with flatulence in my bowels; after that a bilious diarrhœa came on, and what passed was very hot, with urine hot and high-coloured; I took some Epsom salts two successive mornings, which greatly relieved me, am almost free from pain, but has still left a fulness in my right side, with a dull pain from my shoulder-blade down my back, with a fulness in my stomach, particularly after dinner.

I have been for these few years troubled with a bilious complaint, at least I have thought it of that nature, my stomach being easily disturbed with acids; bowels often disordered, lax stools and very hot, which often bring on piles, often a dull pain in my back towards the right side; my appetite in general very good.

I do not apprehend my case immediately alarming, but

will take it as a great favour, if you will relieve me from the symptoms I have stated: my friend, who is the bearer of this, will give you any further information you require.

I am,

Your's respectfully,

H. S.

A friend of the above gentleman residing in town, delivered me this letter, when he gave me every information requisite. By a strict attention and perseverance to the plan of treatment recommended, I had the satisfaction to learn from his last correspondence, dated July 7, that his health was perfectly re-instated.

That an increased sensibility of the liver, and strong inflammatory action, often attends chronic affections of the organ, which have existed for years, is clearly demonstrated in the following case, drawn up by the patient herself, a lady aged 35, of rather a robust and full habit. It is one which shews that great judgment and discrimination are necessary in making the proper distinctions in the treatment, and that the mercurial principal so much followed, will not uniformly succeed, and is not even admissible for a period until *increased excitement* is removed.

"I have constant pain and soreness on each side the stomach, and at times, the whole of the right side affected to the back, and frequently communicates to the shoulder, more particularly the right, and sometimes a pricking pain there; when the side is not so much affected, a great internal heat in the lower part of the bowels, and much irritation after passing urine, or stool; the former very frequent, particularly when walking, or any exertion; the bowels in general costive, though, at times, extremely relaxed, amounting to dysentery; after breakfast, frequently a pain in the pit of the stomach, which continues for an hour or two, particularly if

walking; in the winter, the breath and chest was so much affected that it had all the appearance of asthma, with a violent hard cough, which returns if the air is sharp; particularly susceptible of cold, and have frequent shiverings; a fulness after meals, and a length of time before the food digests; a tolerable appetite, though soon satisfied, and more inclination for fruit and vegetables than any other diet; can fast very long without uneasy sensations, or desire for food; a great heat of a morning all over the sides and bowels; restless nights, with heavy, though unrefreshing sleep, and great difficulty of turning in bed; the pulse in general low, and great lassitude throughout the whole frame, but seldom depression of spirits; much wind in the bowels; a pain in the legs after walking, particularly up hill; carriage exercise always of service; have occasionally taken calomel in small quantities, and salts about a quarter of an ounce at a time, from which, found only temporary relief, and always left langour and irritation; frequent gripings in the bowels, and almost every medicine produces it; very seldom sick at the stomach, and never, even at sea, throw up bile; aloes disagree, and all heating medicines, the stools being always hot and acrid, attended with considerable forcing pain; extremities cold, and very difficult to be thrown into a perspiration; subject to faintness when at stool, which is not unfrequently attended with piles and the falling of the gut. About twelve years since the first attack of the disorder, and have been afflicted with it, more or less, ever since; but for the last two years, the symptoms have been daily getting worse.

"E. K.

"I forgot to mention that, at times, my urine is as clear as spring water, and in large quantities, at others very thick, and little of it; exercise, in general, produces the former, particularly walking."

From the very minute detail of the above case, by the patient, who appears to have watched the progress of her complaint with the utmost attention, I was led to expect very important disease of the abdominal viscera, and my examination fully verified my suspicion. Considerable mischief could be traced through the liver and spleen; both of these organs were much increased in size, and were also acutely sensible to the touch; any pressure on the parts occasioned considerable pain, which extended thoughout the whole peritoneal membrane.

Although this case exhibited such extraordinary derangement, as from common view to demand the use of mercury, yet, from the high irritability and marked inflammatory action present, the *use* of *that* medicine, at this period, in any shape, must have been productive of great evil, from the additional excitement it would have induced on that chain of organs already suffering from over stimulus; and here I may remark, that although this medicine is allowed to possess great power in hepatic complaints, yet, its indiscriminate use, in many cases, have done infinite harm, and thus brought it, not unjustly, into discredit.

It is right to observe, that wherever an active inflammatory disposition exists, a subduction of it must be effected; until that end is obtained, all manner of excitement must be avoided; consequently, abstraction of blood must form the first step in our curative arrangement; cupping, therefore, over the diseased region was immediately employed, and repeated in three days; finding those means of depletion were insufficient to unload the vessels, I was obliged to direct the application of leeches, and recourse was, of necessity, again had to them in six days.

The diet and regimen were, of course, strictly antiphlogistic, and all cordial stimuli totally forbidden.

With this preliminary, the use of the medicines, here specified, was directed:

℞ Magn: Sulph: ʒi.
Sodæ: Carbon: gr. xx.
Syr: Cort: Aur: ʒss.
Aq: Carui: ʒij.
Tinct: Cardam: Comp: ʒss.
Aq: Distil: ʒx. M: ft: Haust.
Ter quotidie capiendus.

℞ Ext: Rhei, gr. vij.
Ammon: Carb: gr. iij.
Ext: Tarax: gr. viij. Fiant.
Pil: tres: sumt: unam cum sing: haust: supra.

In the course of a fortnight, from the commencement of this plan, a sensible amendment was discoverable by a reduction of the size of the diseased parts, and a diminution of that morbid sensibility which marked the state of increased action; the future arrangements, medical, dietetic, &c. &c. were of course varied according to the progressive changes effected, and I have the satisfaction in the present edition to state, that my hopes have not been disappointed, that the lady is considerably recovered in health; but, from the length of time during which the disorder has existed, as I predicted, her recovery cannot be expected so complete as in any case of shorter duration, and where the abdominal viscera in general have not been so grievously diseased.

The following interesting case was sent to me for consultation, by a gentleman who ranks high in the medical profession.

Sir,

I am much pleased by the perusal of your late Treatise on Bilious Diseases, and so convinced am I of the truths therein contained, that I am induced to ask your opinion of my own case. I have adopted this mode previous to my seeing you, partly from an unwillingness to take up your time, and partly that you may reflect on it at your leisure.

Many years ago I had a smart attack of jaundice, which was removed in a few days; but from that period, I have been more or less subject to dyspepsia, great irregularity of bowels; at times, sudden and violent attacks of diarrhœa, accompanied by tormina; and at other times, obstinate constipation; these complaints have been made worse by campaigning in Egypt, Sicily, Spain, and other parts.

My present symptoms are great flatulency of bowels, langour, drowsiness, irregular appetite, and my evacuations are by no means in proportion to the food I take in, are small, and always in the form of scybala, vary in colour, and sometimes come away in a pultaceous form, and look like gruel; I have, occasionally, great anxiety near the duodenum, and likewise about the transverse arch of the colon, which is more or less distended with air. If you can put me in a way of becoming more tolerable, I shall be greatly obliged to you.

I have had the advice of many medical friends, have visited Cheltenham and Bath, and have taken a farrago of medicines, none of which appear to have done any more than afford temporary relief.

I am, Sir,

Your obedient humble Servant,

G. Y.

Surgeon to the Forces, &c. &c.

Piccadilly, July 2, 1815.

I was, accordingly, visited by the above gentleman, and having given him my opinion of his case, such measures of treatment were recommended as he highly approved of, and which he has since carried into effect, with much satisfaction and comfort to himself.

The subjacent case was recently transmitted to me by a highly respectable clergyman, residing in the County of ————, whose statement appears so distinctly descriptive of those sufferings, which are so often experienced by invalids labouring under hepatic obstruction, that has led me to its insertion.

Sir,

Having just perused the second edition of your interesting Work on Liver Complaints, &c. I am induced, from a state-

ment of the permanent benefit which numerous invalids have reaped from your advice, to solicit your kind assistance towards myself. When in college, (from 1802 to 1805) I, like a very thoughtless young man, and though repeatedly warned of the ultimate consequence by a medical friend, did not attend to the calls of nature so regularly as I ought. Here, I believe, commenced the foundation of subsequent evils. In the year 1807 I had a severe bilious fever for upwards of three months, which materially weakened my (previously healthy) constitution. Ever since that period, I have been more or less subject to a bilious disorder, the particulars of which I will endeavour to state as correctly and as minutely as I can. Before, however, I do this, I will briefly describe to you my general habits and mode of living: at breakfast I mostly take tea, eat a sparingly buttered toast, and a small slice of ham; the bread is made of rye and wheaten flour, in equal quantities. I dine regularly at two o'clock, with a good appetite, and eat rather hastily; mutton or beef, boiled or roasted, is generally our standing dish; my only vegetable is potatoe, except when green peas are in season, and then I transgress; my beverage is about two-thirds of a pint of honestly brewed ale: I drink no wine after dinner, as it would soon ferment, and produce an acid sensation in the stomach. At supper I eat sparingly, and often drink nothing but toast and water. I smoke one pipe after dinner, and one after supper. My habits are of a studious cast, though not what I should denominate very sedentary. Upon an average, I am in my study from two to three hours in a morning after breakfast, and the same period after tea in an evening. I generally walk one hour before dinner, in case I do not take a ride on horseback; to which latter exercise, I have a strong disinclination. These, Sir, are my general habits and mode of living.

I will now endeavour to state to you, how my disorder affects me. In general, then, between breakfast and dinner,

I have no unpleasant feelings whatever. After dinner, I often (though not every day) feel much flatulence and fulness in the stomach; and more particularly, a noisy, rumbling (and I might add, *almost constant*) collection of wind in the bowels, causing a kind of weight, and a more or less pressing distension or tightness across the lower part of the body; this latter circumstance I wish more prominently to mention to you. These flatulent and full feelings in the stomach will, before six o'clock in the evening, be sometimes accompanied with an acute, oppressive, pulsating head-ache; tinnitus aurium—an acute pain across the forehead and in the eyes—the eyes heavy, and the countenance sallow. These head-achs, which to me are the most distracting part of the business, I have about once a fortnight or three weeks; no season of the year seems to make any difference in this respect: dizziness in the head is the sure precursor of an attack: at such times I am obliged to take a calomel pill, which generally gives me a short relief. My sleep, though not so sound as formerly, is still refreshing, and I am not harrassed with any frightful dreams, except now and then on a Sunday night. This, however, I attribute in a measure, to the previous labour of the day, as I have two full services and two sermons, which require considerable exertion; as such, on a Sunday evening, I often feel drowsy for half an hour, or so, after tea, with occasional pains in my knees, but in no other part. I sometimes feel a momentary fluttering (seemingly) at the heart; I also sometimes feel internally, a little below the left breast, a hot sensation, (pain I can scarcely call it) as if it were concentrated into the compass of a walnut-shell, and from thence shooting, or diffusing itself through the left breast, but no where else. In an evening feel a slight increased heat in the palms of the hands, and more in the left than the right. I am not low-spirited, or nervous, or feel any disinclination to enter into company, save when oppressed with an head-ach. My memory is somewhat impaired, and I find, that the same

quantum of application fatigues me more than it originally did. My age is 38. As to the evacuations from the bowels, they are by no means regular or correct, either as to quantity or quality. Generally they are of a brown, firm (and if I may so speak, toward the projecting or issuing end from the rectum), knotty consistence; when broken in that part, they discover an intermixture of viscid glary mucus, and are at times partially coated with it; they are seldom of a light, spongy or frothy consistence; very rarely are they thin, with a mixture of hard fæces. Some three or four times, during the last five years, I have been a little affected with piles, when the body was more than usually costive, but at no other time. My urine is in general of a highish brown colour, occasionally depositing a turbid, floating, stringy sediment: it varies very little from this state. These, Sir, are my general feelings and symptoms, and were I to sum them up in one sentence, it would be, that I am persuaded the liver is affected in its biliary secretions; that the stomach, sympathizing with it, is proportionably influenced by its derangement; and that indigestion, &c. are but the effects of it the primary cause. As I confidently anticipate you will be able to prescribe for my effectual relief, I shall feel much gratitude and obligation by your early communication on the subject. In the mean time, I beg leave to subscribe myself,

Your humble and obedient Servant, F. T.

P. S. I may just observe to you, in addition to the symptoms already stated, that a firm pressure or push of the thumb on any part of what I conceive to be the seat of the liver, gives me no pain.

To Mr. John Faithhorn,
Surgeon,
Berners Street, London.

The above gentleman continued under my care about ten weeks, during which he pertinaciously attended to every injunction recommended, and in his last correspondence, he begged to offer most grateful acknowledgments, with the expression, "I feel a renovated man."

CONCLUSION.

On considering the enumeration of the different varieties of chronic hepatitis, it will strike every reader, that the disease is one of the most fallacious nature that can occur to a practitioner; he has, for the most part, no pain to direct him in the early stage of the complaint, and should any uneasiness be present, in a majority of cases, it fixes itself in the opposite side to that, which forms the seat of the affection; he is, therefore, left entirely to form his judgment from collected observation on a variety of symptoms, such as we have embodied in the history: yet, notwithstanding all the information derived from these sources, he is often under the necessity of resorting to that dernier and infallible guide for his direction, the state of the secretions; as well as to a minute examination of the hypochondriac region, so far as it can be accomplished; thus he will seldom be mistaken in a just opinion of the malady; and if so, his treatment will be conducted on such rational principles, as to ensure, in the greater number of cases, a favorable issue of the disease.

An examination alone, however proper, will not invariably determine the precise condition of the liver; as this organ, to the touch, may feel in the most correct state at its inferior edge, while, at the same time, its upper surface may be enduring the greatest inroads of disease, and alteration of structure. It is from this circumstance being overlooked, that cases of liver disease have so frequently foiled practitioners, from their true seat and nature lying beyond manual detection.

So, on the whole, we cannot too often repeat, that in forming our judgment, we are not to be guided in all cases either by the apparent symptoms, or yet by the examination of the part for ascertaining the existence of such diseases; but must rest chiefly on the appearance and changes passing in the biliary secretion; by such evidence as these passing changes

demonstrate, we can never be misled in marking the presence or absence of disease, a truth which cannot too frequently be noticed or imprest on the minds of practitioners and patients: for here we have more direct and certain means of developing the hidden cause of the evil, than from any other source.

The method of treatment pointed out in the above work, is built on the solid basis of experience, and requires no aid from the seducing embellishments of hypothetical and far-fetched reasoning; the construction of theories, and indulgence in imaginary causes of disease, have greatly impeded the progress of real practical science; for whatever merit either of ingenuity or originality these theories may possess, they have only flourished to be forgotten, and the most eminent speculating physicians have left little on record of utility to mankind, to prevent their memory sinking into oblivion.

On the other hand, in a practical point of view, a consideration of the vast importance of the biliary secretion in the animal economy, naturally leads to correct indications, and consistent measures of treatment: the neglect of this, I am persuaded, has been, not unfrequently, the cause that many have fallen sacrifices to disorders, from which they might have otherwise completely recovered.

J. Innes, Printer, 61, Wells Street, Oxford Street, London.